

Organizational Stress

ORGANIZATIONAL STRESS:

Studies in Role Conflict and Ambiguity

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STUDIES IN ROLE CONFLICT AND AMBIGUITY

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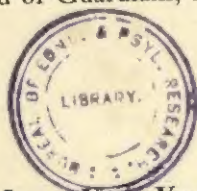
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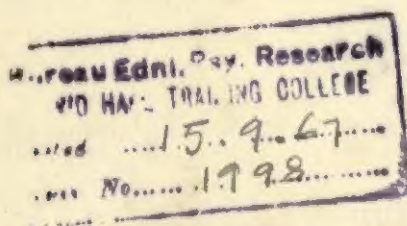


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To Our Families

Preface

THIS BOOK IS CONCERNED with the nature, the causes, and the consequences of two kinds of organizational stress: role conflict and role ambiguity. But our work on these aspects of modern organizational life is part of a larger enterprise: a program of research to understand the impact of organization on individual. This research program was launched five years ago at The University of Michigan as a joint effort of the Survey Research Center and the Research Center for Group Dynamics. Major support for the program has come from the National Institute of Mental Health, and supplementary support has come from other sources, including several of the companies in which research has been conducted.*

In addition to the studies of role conflict and ambiguity, research in the program has been conducted on the following problems: Work-induced disruption of the rhythms of individual and family life—the correlates of working on rotating shifts; the relationship of status to certain criteria of health and illness behavior in hierarchical organizations; social psychological factors in relation to intrafamilial patterns of rheumatoid arthritis; communication of personal evaluations from superiors to subordinates in relation to self-esteem and subsequent performance; and effects of unemployment and retraining on self-esteem and self-identity.

These and other projects, although they deal with a wide range of phenomena, share the research aims of the program. All are concerned with developing research methods, theory, and substantive findings which treat fully the influences of the contemporary environment on mental health.

The studies of role conflict and ambiguity were, as the array of authors suggests, a group effort. Almost without exception, all staff members participated in all phases of the work. There was some division of labor, of course. Donald M. Wolfe was responsible primarily for the intensive study. J. Diedrick Snoek, in addition to collaborating

* The studies of role conflict and ambiguity were supported directly by grants M-3346 and MH 03346-04A1. They benefited also from grants in support of related projects and programmatic work: M-3874, M-9132, and M-9177.

on that study, had major responsibility for the national survey. Robert P. Quinn was involved in the work from the beginning, and his contributions to the writing were particularly important. Robert A. Rosenthal concentrated on the measurement of personality and the integration of personality variables into the research. In addition to the authors, our staff included Roger Christenfeld, Brenda Gibson, and (in sequence) two highly competent and dedicated secretaries, Lise Leistner and Rita Lamendella.

To acknowledge fully the sources of intellectual guidance and inspiration is beyond our abilities and memories. There is an obvious debt to those who have worked with role theory, that source of still unrealized theoretical promise; we have been helped most by the work of Newcomb, Rommetveit, and Gross, Mason, and McEachern. Less obvious perhaps are the effects of the continuing critical give-and-take with colleagues in the Institute for Social Research, especially our fellows in this program of research on work and health, Sidney Cobb, John R. P. French, Jr., and Floyd C. Mann. The list lengthens when we look outside the Institute and must remain for the most part without individual acknowledgment; we want to express our special thanks, however, to those who generously read and commented on earlier drafts of this manuscript: Chris Argyris, Warren Bennis, Herbert Simon, Richard Walton, and Earl Wolfe.

Finally, we acknowledge gratefully the generosity and hospitality of the several corporations which were the sites of this research. To name them or the men with whom we dealt would risk their anonymity. Our gratitude for their help is nevertheless profound.

ROBERT L. KAHN

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PART ONE

Theoretical Orientations

1

Introduction

MANY OBSERVERS have remarked the unresolved problems of self-identity in contemporary American life. To the haunting question "Who am I?," answers are sought from an environment often unresponsive or itself in flux. It is not accidental that the mental illnesses of our time are manifest so frequently as problems of orientation. We are perhaps more familiar than any other people with the twin dilemmas of responding appropriately to opposing and incompatible forces, or to forces for which both source and target remain obscure. Conflict and ambiguity are among the major characteristics of our society, and we are marked by them. Nor will either condition be easily abated, for they are among the unintended consequences of two of the most deep-running trends in modern industrial life—the increasing dominance of physical science and the growth of large-scale organizations. These are sweeping assertions and probably inaccessible to scientific proof or disproof. We can get some sense of their plausibility, however, by tracing a few of the implications of scientific and corporate development.

The scientist is not now, if he ever was, merely Man thinking. Indeed, he may not be Man thinking at all, except in the area of his own specialty. In his relations to other men, he is increasingly alienated. The complex procedures, special apparatus, and private vocabulary of physical science have made it uncommunicable to people outside. In an earlier era science had already opposed the superficial evidence of the senses; Galileo taxed the imaginations of men no less than Einstein. In our time, however, the breach between science and society has acquired a new depth: the concepts of physical science, long ex-

pressible to nonscientists only in metaphorical terms, are becoming inaccessible to analogy. The result, even for the literate and engaged, is dependence on the experts.

Of the many consequences of an unchallenged initiative in the physical sciences, one concerns us here—the increasing rapidity of technological change. Each scientific discovery, each insight into possible application carries with it a great impetus for actualization. This drive comes in part from promised improvements in health and standard of living; its vital source, however, is the immediate reward to the user. In competition among companies, as among nations, supremacy depends on technological innovation. To question the rate of change or its source seems reckless, or worse. The pause for reflection is condemned as suicidal.

These several tendencies interact vigorously; the growth of science creates a culture of dependence on experts and an accelerating rate of technological change. The fact of rapid change invalidates the experience of the individual, and as his experience becomes irrelevant, his dependence on expertise approaches the infinite. For some the irrelevance of their experience and skill is announced as unemployment. For others it is the discovery that our society deems the accumulated experience of the elderly more appropriate to arts and crafts than to wise advice. The world for which their advice would have been useful we have no longer with us. One does not speak the language of computers from common experience nor rely on it to solve the problems of moon flight. We wait to be told, in something less than translation, how science is changing the world.

The second dominant trend of our time is the increasing importance of large-scale organizations in shaping individual and social life. Bertrand Russell (1930) once summed up the purpose of organizations by stating that "mankind decided that it would submit to monotony and tedium in order to diminish the risk of starvation." We need not question Earl Russell's implication about the origins of organization nor his assertion as to the ensuing costly exchange. Let us consider instead the important organizational truth implied in the phrase "to diminish the risk of starvation." An organization is above all purposeful. It exists for the achievement of some goal—the creation of a product or the rendering of a service—and the major criteria by which it is judged are its success and efficiency in goal achievement.

By those criteria the large-scale organization—corporate and bureaucratic—is a tremendous success. Whether or not the corporation deserves to be called the greatest invention of the twentieth century, as some have alleged, it is an eminently rational solution to a mas-

sive problem of human and technological organization. Rationality is especially manifest in the fitting together of component parts and in the carefully planned pattern of related functions in the service of an over-all goal. To bring that plan to life requires only the appropriate behavior of people as members of organizations. In that requirement, however, lie most of the weaknesses of modern organizations and most of the frustrations of their leaders.

One of the great inherent needs of any organization is dependability of role performance. In the interdependent process of organizational production, each member must do his part. Moreover, the more complex and specialized the organization becomes, the greater becomes the degree of interdependence and the need for conformity to the requirements of organizational role. One field hand missing from a gang picking cotton merely reduces the total product by the amount of his own production. But one function unperformed in an assembly line makes the total product defective or inoperative.

Out of this need for conformity stems one of the defining characteristics of formal organization, perhaps its most essential characteristic: influence over member behavior. Much of the paraphernalia of organization has to do with the maintenance and justification of influence. It is worked at; it is attacked and defended; it is defined and redefined with respect to style, means, and boundaries. And it is successful; in spite of the defiance and ingenuity of human beings, the degree of conformity to organizational requirements is prodigious. Within an organization members behave in ways in which they would not behave outside it. They use titles that would not be used outside. They wear uniforms or costumes that would embarrass them in other circumstances. Above all, their behavior in organizations shows a selectivity, a restrictiveness, and a persistence that is not to be observed in the same persons when outside the organization. F. H. Allport called attention to this fact many years ago and gave dramatic expression to it by comparing the normal curve of individual attributes and acts to the curve of conformity (*J*-curve), a curve which is characteristic of organizationally determined behavior (Allport, 1934).

The two dominant societal trends—the vast growth of formal organization and the equally large expansion of science—have features in common other than a history of rapid development and increasing significance. Both encourage and accelerate the rate of technological change: science through acts of discovery, organizations through the competitive search for increased efficiency and new markets. Both create for many people a stance of conformity, dependence, and deference toward specialists. Most hierarchical organizations demand such

behavior. The scientific method specifically opposes it within the scientific enterprise, but in the course of encouraging among scientists the values of skepticism and objectivity, science has created for nonscientists the opposite of these values—an emphasis on conformity and second-hand assurances. In short, the growth of big organizations and the development of big science have both contributed to a high degree of dependence and conformity: one through its basic requirements and ideology, the other through the unintended consequences of its own freedom and expansion.

All this is speculative and some of it, if true, is certainly not new. There have been many times more obedience-demanding than ours, and most contemporary societies are far more so. But it is not the conformity requirement alone that creates problems of conflict and ambiguity. Conflict and ambiguity seem rather to be emergent problems, arising from the demand for successful conformity under conditions of ceaseless and accelerating change. To the costly ideology of bureaucratic conformity is added the irony of conflicting and ambiguous directions.

In their extreme form conflict and ambiguity pose for the individual an almost insurmountable problem. One is reminded of the psychosis-inducing animal experiments of earlier years (Maier, 1949), in which rats who had learned well to perform a rewarding sequence of tasks were confronted with a pattern of requirements successively altered beyond their ability to comprehend. For these animals frustration, rage, and struggle ultimately were replaced by a state of shuddering passivity in which even the elementary responses of self-defense were lacking. We assume that for human beings an equally unintelligible environment would be no less damaging. From the beginning of life we learn what and who we are from the ways in which people in our environment respond to us. A sense of identity is thereby created, and the process of identity formation, once begun, never ends. Each new experience must be somehow integrated with the existing sense of self, somehow made meaningful in terms of the self-identity. Conditions of conflict and ambiguity, therefore, are not merely irritating; in persistent and extreme form they are identity destroying.

Approach and Objectives

The research described in the following chapters was based on the assumption that the quest for identity is in fact a significant problem for many people, that this in combination with other needs leads them

to look for certain kinds of satisfactions in the work situation, and that the work situation frequently presents conditions of ambiguity and conflict rather than clarity and harmony. The research was designed to determine the prevalence of these conditions as well as their distribution in organizations and in the population at large. It was designed also to trace the effects of conflict and ambiguity on the persons exposed to them. More specifically, our principal objectives were:

1. To explore the extent of role conflict and role ambiguity in industrial positions;
2. To identify the kinds of situations which are characterized by a high degree of conflict or ambiguity;
3. To determine the association between such conditions and several broad criteria of personal adjustment and effectiveness; and
4. To explore the extent to which such effects are modified by certain characteristics of the individual and of his interpersonal relations.

These research objectives represent a more general theme—that social psychological factors in the contemporary environment have major effects on the physical and psychological well-being of the person. In a sense this proposition is self-evident. It is nevertheless little explored in theory and without major influence among practitioners in the helping professions. The major theories of mental health and illness (for example, psychoanalytic theory) are historically oriented. They search for past causes of present problems and seek to understand present behaviors primarily in terms of retrospective data. The major therapeutic approaches represented by psychoanalysis, counseling, and much of social work are consistent with this historical orientation. They are for the most part individually based and remedial in their stance, seeking to repair the effects of past stress by creating some enlargement in present understanding or capacity of the individual.

The research program of which the present study is a product exemplifies a different approach—one which we see as complementary to therapy in much the same way that public health complements the conventional practice of medicine. Through a series of related studies we seek to discover how much of present discomfort and illness, how much of present self-actualization and health is explicable in terms of the contemporary adult environment. This approach has proved powerful in other fields. The elimination of anopheline mosquitoes and the purification of polluted water supplies have achieved what armies of doctors and tons of drugs could scarcely have done.

The research design that we developed for the study of role conflict and ambiguity in organizations is treated at length in Chapter 2. We need mention here only a few of its major objectives. We wanted to obtain some sense of the prevalence and distribution of the key conditions under study, conflict and ambiguity. We wanted, in other words, to locate the societal and organizational breeding grounds for these conditions. In addition, we wanted to know by what means these environmental conditions are transmitted to the individual; what experiences are created for him by virtue of the degree of conflict or ambiguity which characterizes his work role. We wanted to know whether the presence of such factors affects different people in different ways, and to what extent individuals manifest different personal styles of response in an attempt to cope with experienced conflict or ambiguity. Finally, we wanted to be able to separate the objective conditions of conflict and ambiguity in the environment from the psychological experience of these conditions, which is inevitably individual. The breadth and variety of these research aims demanded a pair of complementary studies: one involving an intensive study of individuals in the organizational environment; the other serving the research objectives of prevalence, representativeness, and generality by gathering data from a probability sample of the national population.

The achievement of these research objectives implies the consideration of several classes of variables. There will be, first of all, those variables that represent our major *causal factors*: conflict and ambiguity. These variables will be defined in terms of the behaviors of members of the organization, behaviors which in combination create the conditions of ambiguity and conflict or their opposites. The second major class of variables includes the *responses* of people in organizations to the varying degrees of conflict and ambiguity to which their positions expose them. These responses will consist of psychological and behavioral factors. For both the causal factors and the responses there is a subsidiary class of variables which is perceptual in nature. Thus, we are interested in the perceptions of individuals which lead to their creating conditions of conflict and ambiguity for others. We are interested also in the way in which the "victims" perceive the objective conditions confronting them, as well as the way in which they respond to these conditions. In addition to these classes of variables, we are interested in three other classes, which can be regarded as providing the context in which the basic causal sequence of conflict and response is worked out. These three classes include enduring *properties of the organization*, which can be

thought of as distal causes of role conflict and ambiguity; enduring *properties of the person*, including demographic factors and attributes of personality, both of which are thought of primarily as mediating the relationship between conflict and ambiguity on the one hand and the response of the individual on the other; and, finally, *characteristics of interpersonal relations*, which function analogously to attributes of the person in modifying the effects of conflict and ambiguity.

The presentation of research design and research findings is done in six main parts. Part I includes Chapters 1-3. Chapter 2 presents in full the theoretical model hinted at in the preceding paragraphs. Chapter 3 provides a description of the over-all research design and the procedures of two related studies: the intensive field study of responses to role conflict and ambiguity in six large industrial plants, and the nationwide survey of reactions to occupational role conflicts and ambiguities.

Part II presents the main effects of conflict and ambiguity on the individual, as those effects were revealed in the two present studies. Role conflict and its consequences are dealt with in Chapter 4, and role ambiguity is the subject of Chapter 5.

Part III deals with factors at a different level of abstraction. It is concerned with organizational determinants of conflict and stress, and considers four such factors, each in a separate chapter. Chapter 6 deals with the concepts of systems and subsystems, relating the intensity of conflict and ambiguity to the requirement for functioning across organizational boundaries. Chapter 7 deals with creative pressure, identifying as a source of stress the requirement to produce innovative solutions to problems for which routine and precedent are lacking. This requirement is treated not as inherently stressful, but rather as stressful in the bureaucratic context. Chapter 8 is concerned with problems of rank and status, exploring the extent to which stress is a characteristic of certain points or positions in a hierarchical structure, rather than a permeating condition of organization. The final chapter in this section, Chapter 9, deals with organizational norms as stressors.

Part IV is concerned with interpersonal relations and treats them as potential stressors, as modifiers of stress, and as the subject of unintended damages resulting from chronically stressful situations. Chapter 10 discusses the formal role relations of authority and status as determinants of role conflict. Chapter 11 examines the place of a single interpersonal variable in the process of role sending—the power of one person over another. In Chapter 12 we turn to the consideration of interpersonal factors as mediators of the relationship between role conflict and signs of strain.

Part V, comprising Chapters 13–17, is devoted to the consequences of personality differences for the response of the individual to differing degrees of conflict and ambiguity. Chapter 13 describes the conceptual approach to personality employed in this research, and presents the major personality measures which were used. Chapter 14 examines the place of neurotic anxiety in the sequence of stress and response. Chapters 15, 16, and 17 present similar treatments for the factors of introversion-extroversion, flexibility-rigidity, and orientations toward achievement versus security.

In the concluding section of the book, Part VI, two styles of summary and integration are attempted. Chapter 18 discusses in detail six cases of individuals who, with varying degrees of success, struggle to cope with the conflicts and ambiguities of their jobs. Chapter 19 presents a summary of the major research findings from both the national survey and the intensive study, as well as a speculative discussion of their implications for the design and management of organizations.

2

A Theory of Role Dynamics

THIS STUDY of role conflict and ambiguity is one of a number of researches that share a common and distant goal: to make understandable the effects of the contemporary environment on the individual, especially his physical and mental health. This goal requires a systematic way of viewing the environment, for without such a viewpoint we could expect at best the accumulation of miscellaneous relationships between external facts and individual consequences. We begin by thinking of the environment of the person as consisting very largely of formal organizations and groups. The life of the individual can thus be seen as an array of roles which he plays in the particular set of organizations and groups to which he belongs. These groups and organizations, or rather the subparts of each which affect the person directly, together make up his objective environment. Characteristics of these organizations and groups (company, union, church, family, and the rest) affect the physical and emotional state of the person, and are major determinants of his behavior.

Given this general approach, we now need a theory of organization or at least a conceptual language for the description and analysis of organization. This is not easy to come by; it has been justifiably observed by March and Simon (1958) that rather little has been said about organizations, but that it has been said over and over again and in many different places. Moreover, our requirements for an organizational theory are stringent. It must be adequate to characterize the industrial environment, since work is one of the major life roles and most people work in industry. We cannot be content, however, with a language specific only to industrial organizations. If we view the

state and behavior of the person as a complex outcome of the pressures to which he is exposed in all the groups and organizations to which he belongs, we must have a common set of concepts for characterizing all roles in all these organizations. Otherwise, it becomes impossible to measure and describe their combined impact or to compare the environment of one individual with that of another. In this chapter we shall elaborate somewhat our approach to organizational theory, and shall describe the major concepts used. These include a definition of organization, of role, and of several role-derived concepts linking organization and individual. Finally, we will propose a model for exploring the effects on the person of role conflict and ambiguity.

Concepts

We begin by distinguishing between the objective environment of an individual and his psychological environment. The *objective environment* of a person consists of "real" objects and events, verifiable outside his consciousness and experience. The conscious and unconscious representations of the objective environment constitute the *psychological environment* of the person.

Organization

The organization in which a person holds a job, for example, exists in his objective environment; it is an objective organization, in contrast to the "psychological organization" that exists in the mind of the jobholder. We define an (*objective*) *organization* as an open, dynamic system; that is, it is characterized by a continuing process of input, transformation, and output.* Organizational input characteristically includes people, materials, and energy; organizational output typically takes the form of products or services, although it may consist mainly of direct psychological return to members. The openness of the organization as a system means that it is eternally dependent upon its environment for the absorption of its products and services, and for providing the necessary input which reactivates the process of transformation and thereby maintains the organization in existence.

Given this approach, the essential defining characteristics of organization are not its name, its physical boundaries, or its legal domain. As

* The characterization of the organization as an open system, as well as much of the ensuing discussion, is based on a forthcoming book by Daniel Katz and Robert L. Kahn, *The Social Psychology of Organizations*.

an open social system, the organization is defined and its boundaries determined by the relationships and patterns of behavior which carry out the continuing cycles of input-transformation-output. These, of course, consist of the motivated acts of human beings. It follows that the organization holds together and functions only so long as people can be motivated to perform the behaviors required to maintain the organizational cycles. Moreover, the major determinants of the behavior of each person in an organization are to be found in the behavior of other members.

We are now confronted with an additional series of questions: What concepts can we use to describe the stable, socially contrived, inter-related patterns of behavior in terms of which organizations have been defined? And how can we move from such properties of organization to the behavior of individuals in organizations and the means by which they are motivated?

Office

Our first requirement in linking individual and organization is to locate the individual in the total set of ongoing relationships and behaviors comprised by the organization. The key concept for doing this is *office*, by which is meant a unique point in organizational space; here space is defined in terms of a structure of interrelated offices and the pattern of activities associated with them. Office is essentially a relational concept, defining one position in terms of its relationship to others and to the system as a whole.

Role

Associated with each office is a set of *activities*, which are defined as potential behaviors. These activities constitute the *role* to be performed, at least approximately, by any person who occupies that office. To understand and describe the means by which organizations attain such predictable and dependable behavior, a number of role-related concepts will be utilized: *role set* or *cluster*, *role expectation*, *role pressure*, *role force*, and *role behavior*.

Role Set. Each office in an organization is directly related to certain others, less directly to still others, and perhaps only remotely connected to the remaining offices included in the organization. Consider the office of press foreman in a factory manufacturing external trim parts for automobiles. The offices most directly related to that of press foreman might include general foreman and superintendent, from

which press foreman's work assignments emanate and to which he turns for approval of work done. Also directly related to the office of press foreman will be the foreman of the sheet-metal shop, which provides stock for the presses, the inspector who must pass or reject the completed stampings, the shipping foreman who receives and packages the stampings, and, of course, the fourteen press operators. Imagine the organizational chart spread out like a vast fish net, in which each knot represents an office and each string a functional relationship between offices. If we pick up the net by seizing any office, the offices to which it is directly attached are immediately seen. Thus the office of press foreman is directly attached to nineteen others—general foreman, superintendent, sheet-metal foreman, inspector, shipping-room foreman, and fourteen press operators. These nineteen offices make up the *role set* (Merton, 1957) for the office of press foreman.

Similarly, each member of an organization is directly associated with a relatively small number of others, usually the occupants of offices adjacent to his in the work-flow structure or in the hierarchy of authority. They constitute his role set and usually include his immediate supervisor (and perhaps his supervisor's immediate superior), his subordinates, and certain members of his own or other departments with whom he must work closely. These offices are defined into his role set by virtue of the work-flow, technology, and authority structure of the organization. Also included in a person's role set may be people who are related to him in other ways—close friends, respected "identification models," and others within or outside the organization who are concerned with his behavior in his organizational role. For example, a businessman's role set (for his job) might include his wife, his customers, and his suppliers, none of whom is a member of the organization but each of whom may influence his behavior on the job.

Role Expectations. All members of a person's role set depend upon his performance in some fashion; they are rewarded by it or they require it in order to perform their own tasks. Because they have a stake in his performance, they develop beliefs and attitudes about what he should and should not do as part of his role. The prescriptions and proscriptions held by members of a role set are designated as *role expectations*. The role expectations held for a certain person by some member of his role set will reflect that member's conception of the person's office and of his abilities. The content of these expectations may include preferences with respect to specific acts and personal characteristics or styles; they may deal with what the person should do, what kind of person he should be, what he should think or believe, and how he should relate to others. Role expectations are by no

means restricted to the job description as it might be given by the head of the organization or prepared by some specialist in personnel, although these individuals are likely to be influential members of the role set for many persons in the organization.

Sent Role. The mention of influence raises additional issues of definition and theory. Role expectations for a certain office and its occupant exist in the minds of members of his set, thereby representing standards in terms of which they evaluate his performance.

The expectations do not remain in the minds of members of the role set, however. They tend to be communicated in many ways: sometimes directly, as when a supervisor instructs a subordinate in the requirements of his job; sometimes indirectly, as when a colleague expresses admiration or disappointment in some behavior. The crucial point for our theoretical view is that the activities (potential behaviors) which define a role consist of the expectations of members of the role set, and that these expectations are communicated or "sent" to the focal person.* In referring to role expectations as sent, we are following the formulation of Rommetveit (1954). He refers to members of a role set as role senders, and to their communicated expectations as the *sent role*.

Role Pressures. The numerous acts which make up the process of role sending are not merely informational. They are influence attempts, directed toward the focal person and intended to bring about conformity with the expectations of the senders. Such acts are called *role pressures*. Some of these pressures (for example, those from superiors) may be directed toward the accomplishment of formally specified responsibilities and objectives of office. Others (perhaps from peers or subordinates) may be directed toward making life easier or more pleasant for the senders themselves. The pressures may come from formal or informal sources; they may or may not be legitimate; in combination they may not conform to anyone's ideal view of the job. They may be prescriptive or proscriptive, punitive or benevolent, subtle and indirect or direct and blatant. They are, in short, whatever requirements and demands are actually communicated to the focal person.

There are a number of dimensions along which role pressures vary, as Gross, Mason, and McEachern (1958) have proposed. Some of the more important are sign (prescriptive or proscriptive), magnitude (strength of the influence attempt), specificity (extent to which the expected behaviors or attributes are made concrete and detailed), intensity (extent to which the focal person is allowed freedom of choice

* The term *focal person* will be used to refer to any individual whose role or office is under consideration, and whose role set is to be identified.

in complying or refusing compliance), and range of conditions under which compliance is intended. Of these, we are concerned especially with magnitude, the strength of the role pressure or influence attempt. Every attempt at influence implies consequences for compliance or noncompliance. In organizations these commonly take the form of sanctions—gratifications or deprivations which a role sender might attempt to arrange for the focal person, depending on his having conformed or not. The availability and visibility of such sanctions are important, whether or not they are used or even threatened. The strengthening of role pressures with the possibility of sanctions is the major basis for their effectiveness in gaining compliance with the requirements of formal organization.

Role Forces. If we regard the organization from the vantage point of a certain office and the person who occupies it, we see that the members of his role set and the pressures which they direct to him are part of his objective environment. To consider his compliance or deviation from his sent role, however, takes us immediately beyond the objective organization and environment. Each individual responds to the organization in terms of his perceptions of it, which may differ in various ways from the actual organization. In the immediate sense, the individual responds not to the objective organization in his objective social environment, but to that representation of it which is in his psychological environment. The objective organization and the psychological organization of a person may or may not be congruent, depending on his ability and opportunity to perceive organizational reality. Thus for any person in the organization there is not only a sent role, consisting of the pressures which are communicated by members of his role set, but also a *received role*, consisting of his perceptions and cognitions of what was sent. How closely the received role corresponds to the sent role is an empirical question for each focal person and set of role senders, and will depend on properties of senders, receiver, substantive content of the sent pressures, and the like.

It is the sent role by means of which the organization communicates to the person the do's and don'ts associated with his office. It is the received role, however, which is the immediate influence on his behavior and the immediate source of his motivation to role performance. Each sent pressure can be regarded as arousing in the focal person a psychological force of some magnitude and direction. Such forces will be called *role forces*. This is not to say that these motivational role forces are identical in magnitude and direction with the role pressures which evoked them. Especially when role pressures are seen as illegitimate or coercive, they may arouse strong resistance forces which

lead to outcomes different from or even opposite to the expected behavior. Pressures to increase production rates sometimes result in slow-downs. Moreover, every person is subject to a variety of psychological forces in addition to those stimulated by pressures from his role set in the work situation. Role pressures are thus only a partial determinant of behavior on the job.

In addition to the motivational forces aroused by role pressures, there are important internal sources of motivation for role performance. One of these stems from the intrinsic satisfaction derived from the content of the role. The concert pianist has many motives which lead him to give performances; one of them is probably the intrinsic psychological return from exercising this skill. But there is another kind of "own force" important in the motivation of role behavior. In a sense, each person is a "self-sender," that is, a role-sender to himself. He, too, has a conception of his office and a set of attitudes and beliefs about what he should and should not do while in that position. He has some awareness of what behaviors will fulfill his responsibilities, lead to the accomplishment of the organizational objectives, or further his own interests. He may even have had a major part in determining the formal responsibilities of his office. Through a long process of socialization and formal training he has acquired a set of values and expectations about his own behavior and abilities. Following Miller (1962), Dai (1955), and others, we conceive of the person as having an occupational self-identity and as motivated to behave in ways which affirm and enhance the valued attributes of that identity.

Role Behavior

A formal definition of role behavior is surprisingly elusive, considering the ease with which the distinction is made in everyday life between behavior in and out of role.

The factory worker arrives at the plant at 7:30 in the morning; he goes to a machine and is greeted casually by several people in the same area, who seem to have expected him. He begins to operate the machine and, except for lunch and rest periods, which seem scheduled, he continues to do so until 4:00 in the afternoon. At that time a whistle blows; he stops work and leaves the plant, along with many others. We have no hesitancy and run no risk in asserting that he has been behaving *in role*—the role of machine operator in plant X.

But our conclusion has been overdetermined and thus made simple. What were the crucial factors? The worker's appearance at a certain time and place, along with others? His apparent acceptance by them

as a member of the organization? The fact that he "punched in," thus affirming the formality of membership—and the right to receive pay? Or the fact that he operated the machine in accordance with the requirements of others whose work depended on his doing so?

Which of these facts is essential to the definition of role behavior, and which facts are not? We can eliminate the latter two readily. Suppose that the worker had neglected to punch in; he might encounter reprimand or even loss of pay, but he would have behaved no differently, been accepted no less, and in our terms been little less behaving in role. Suppose that he had operated his machine very badly, and quite contrary to the needs and expectations of those around him; his role behavior would have been unsatisfactory to them, but it would have been no less behavior in role—at least until they became dissatisfied enough to eject him. And thus by a process of elimination we arrive at the defining factors: by role behavior we mean behavior which is system relevant (not necessarily congruent with the expectations and requirements of others), and which is performed by a person who is accepted by others as a member of the system. Ordinarily these criteria will be reinforced by the formalities of organization.

Moreover, both the criteria of membership and system relevance are necessary; neither is in itself sufficient. If an arsonist sets fire to a local plant, this act is unquestionably system relevant but is not role behavior. On the other hand, an employee in the plant is not engaging in role behavior when he wipes his brow or kicks the gate on the way out of the factory at night; he is a member of the organization, but these behaviors are not system relevant, not in role.

One of the consequences of our definition of role behavior is the possibility of its being determined by forces and pressures originating outside the organization in which the behavior occurs. If a worker performs very badly on the job because he is concerned over something his wife said at breakfast, his poor work is nevertheless behavior in role. Our major focus is on behavior in the work role, and we seek its causes first among forces generated in the work situation itself, and then in extraoccupational places. Occasionally, however, our focus of interest shifts, and we wish to know the effects of certain causal factors regardless of how many roles they may permeate.

Role Conflicts

Our conception of social roles takes account of the fact that various members of the role set may hold quite different role expectations to-

ward the focal person. At any given time they may impose pressures on him toward different kinds of behavior. To the extent that these role pressures give rise to role forces within him, he will experience a psychological conflict. We are interested in conflicting expectations primarily because they create psychological conflict for the person who is their target.

Sent role conflict is defined as the simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other. In the extreme case, compliance with one set of pressures excludes completely the possibility of compliance with another set; the two sets of pressures are mutually contradictory. For example, a person's superior may make it clear to him that he is expected to hold his subordinates strictly to company rules and to high production schedules. At the same time, his subordinates may indicate in various ways that they would like loose, relaxed supervision, and that they will make things difficult if they are pushed too hard. Here the pressures from above and below are incompatible, since a style of supervision which satisfies one set of pressures violates the other set. Moreover, such cases are so common that a whole literature has been created on the problem of the first-line supervisor as "the man in the middle," "master and victim of double-talk."

We are concerned with role conflict as a fact in the environment of the person and as a fact in his internal, psychological life. The former we will refer to as objective or sent role conflict when necessary to distinguish it from experienced or psychological conflict.

Two implications of this orientation should be made clear. First, the intensity or magnitude of a person's role conflict will depend on the absolute and relative strength of the forces; that is, if there are two opposing forces, the greater the strength of the weaker force, the greater the conflict. Second, this conception deals with conflict at a given moment as it is aroused by a given set of internal events (forces) and external events (pressures). The extent to which a particular level of conflict characterizes a position over time or throughout changes in personnel is a question to be determined empirically, not by definition.

Types of Role Conflict. Several types of role conflict can be identified. The first might be termed *intra-sender conflict*: different prescriptions and proscriptions from a single member of the role set may be incompatible, as, for example, when a supervisor requests a man to

acquire material which is unavailable through normal channels and at the same time prohibits violations of normal channels.

A second type might be termed *inter-sender conflict*: pressures from one role sender oppose pressures from one or more other senders. The pressures on a foreman for close supervision from his superiors and for looser supervision from his subordinates provide an example of inter-sender conflict.

A third type of conflict is *inter-role conflict*. Here the role pressures associated with membership in one organization are in conflict with pressures stemming from membership in other groups. Demands from role-senders on the job for overtime or take-home work may conflict with pressures from one's wife to give undivided attention to family affairs during evening hours. The conflict arises between the role of the focal person as worker and his role as husband and father.

All three of these are types of sent role conflict. They will regularly result, of course, in psychological conflicts for the focal person. Other types of conflict are generated directly by a combination of sent pressures and internal forces. A major example is the conflict which may exist between the needs and values of a person and the demands of his role set. This fourth type of conflict is called *person-role conflict*. It can occur when role requirements violate moral values, as, for example, when pressures on an executive to enter price-fixing conspiracies are opposed by his personal code of ethics. In other cases of person-role conflict the person's needs and aspirations may lead to behaviors which are unacceptable to members of his role set; for example, an ambitious young man may be called up short by his associates for stepping on their toes while trying to advance in the organization.

From these four basic types other complex forms of conflict sometimes develop. For example, a very prevalent form of conflict in industrial organizations is *role overload*. Overload could be regarded as a kind of inter-sender conflict in which various role senders may hold quite legitimate expectations that a person perform a wide variety of tasks, all of which are mutually compatible in the abstract. But it may be virtually impossible for the focal person to complete all of them within given time limits. He is likely to experience overload as a conflict of priorities; he must decide which pressures to comply with and which to hold off. If it is impossible to deny any of the pressures, he may be taxed beyond the limit of his abilities. Thus overload involves a kind of person-role conflict and is perhaps best regarded as a complex, emergent type combining aspects of inter-sender and person-role conflicts.

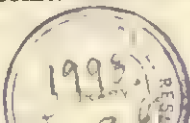
All these types of role conflict have in common one major charac-

teristic: members of a role set exert role pressures to change the behavior of a focal person. When such pressures are generated and "sent," they do not enter an otherwise empty field; the focal person is already in role, already behaving, already maintaining some kind of equilibrium among the disparate forces and motives which he experiences. Pressures to change represent new and additional forces with which he must cope; by definition they threaten an existing equilibrium. Moreover, the stronger the pressures from role senders *toward changes* in the behavior of the focal person, the greater the conflict created for him. For example, suppose that several subordinates (role senders) are trying strenuously to get their supervisor (focal person) to delegate more authority to them, but he does not comply with these influence attempts. It follows that there must be stronger forces (either internal or external in origin) against such a change. It might be that the focal person's own superior has ordered him to keep a firm hand on the reins of authority, or that the beliefs and values of the focal person himself make it difficult for him to assume the risks of delegation. Whatever the reason, the magnitude of the objective (sent) role conflict for the focal person is by definition at least as strong as the unsuccessful pressures which his subordinates are sending in an attempt to change his behavior.

Even in the extreme case of a person who satisfied all his role senders but not himself, we would conceptualize the strength of the conflict in terms of the forces generated internally and unsuccessfully to resist the external pressures of role senders. Here, of course, the sent pressures from role senders would be to "continue without change," while the "self-sending" would be directed toward change. We have not attempted to measure this kind of conflict situation in the present study. Instead, we have attempted to develop a comprehensive measure of the combined magnitude of all the sent pressures to change which are directed to each focal person. This measure we regard as approximating the degree of objective role conflict to which each such person is subjected.

Role Ambiguity

Much of role conflict, as we have defined it, can be thought of as a kind of inadequate role sending; lack of agreement or coordination among role senders produces a pattern of sent expectations which contains logical incompatibilities or which takes inadequate account of the needs and abilities of the focal person. A different pattern of inadequacy in role sendings constitutes role ambiguity.



Each member of an organization must have certain kinds of information at his disposal if he is to perform his job adequately. Communication processes and the distribution of information are matters of concern in every organization and are closely linked to criteria of organizational effectiveness. The availability of role-related information also may have profound implications for personal adjustment and emotional well-being.

As with role conflict, objective ambiguity must be distinguished from its subjective counterpart. Objective ambiguity is a condition in the environment; subjective or experienced ambiguity is a state of the person. The meaning of this distinction can be illuminated by means of an analogy from the field of meteorology. One property of the atmosphere, of concern to airplane pilots among others, is the degree of "visibility." Visibility is described in terms of how well a person with 20-20 vision might be expected to see in a given environment; it is the distance at which he can be expected to make certain visual discriminations. Thus the concept of visibility is ultimately response-based, but is independent of the visual acuity of any given perceiver. Moreover, in its operational form visibility is not a property of the perceiver at all. It refers instead to the density of moisture and dust particles in the air. Its major importance lies in the extent to which it influences vision, and the measurement of visibility is customarily expressed in terms commensurate with the vision process.

The concept of objective ambiguity here is similarly constructed. It characterizes certain properties of the social and physical environment in terms of their likely influence on the perceptual and cognitive processes of a "normal" person. Their actual influence on a particular individual constitutes his subjective (experienced) ambiguity in that particular situation. Thus objective ambiguity is to visibility as experienced ambiguity is to visual discrimination; the former concepts refer to states of the environment and the latter to psychological processes in the person which may be affected by the environmental states.

Both ambiguity concepts assume a need for and, in some degree, the availability of various kinds of information. Certain information is required for adequate role performance, that is, in order for a person to conform to the role expectations held by members of his role set. First of all, he must know what these expectations are: the rights, duties, and responsibilities of his office. Second, he must know something about what activities on his part will fulfill the responsibilities of office, and how these activities can best be performed. In other words, he requires various sorts of means-ends knowledge. He wants also to know the potential consequences of his role performance or nonperformance for himself, his role senders, and the organization in general.

Certain information is required for personal comfort and psychological return. In general, one needs to know what kinds of behavior will be rewarded or punished, the nature of the rewards and punishments, and the likelihood of their occurrence. He needs to know what kinds of behaviors will be satisfying or frustrating for his personal needs and values, what dangers and what opportunities exist in the environment. Certain needs, values, and aspirations are held sufficiently in common among the members of a particular population that, regardless of what particular person occupies a given position, the requirement for certain types of information is predictable.

The concept of objective ambiguity does not, of course, imply a need for information as existing in the environment. Needs exist in or characterize people. Certain kinds of common needs, however, specify the kinds of information which people generally require, and permit us to compare environments with respect to their provision of such information. For example, needs for bodily safety are present in virtually everyone, and we thus need to know of physical dangers which may exist. Security needs are universal, and information about threats to security is required for realistic coping with threat. Needs for love, for recognition and achievement, for money (the list could be extended indefinitely) are sufficiently widespread that it seems reasonable to evaluate environments in terms of information relevant to these needs, even without knowing the specific strengths of the needs in any one person. For example, ambiguity—the lack of clear, consistent information—about financial security in a given position is apt to be stressful for almost anyone who might occupy that position. Information about opportunities for advancement, about respect and acceptance by others, about which behaviors lead to rewards and which to punishment, is required for most of us to be personally comfortable in our jobs.

Lack of information at a particular point in an organization can result from many causes. Under some conditions the required information just does not exist. Who can confidently predict, for example, when the next recession might come or what scientific breakthrough might lead to major changes in products or production techniques? Under other conditions the required information exists but is not available to the person who needs it. For example, clear-cut plans for a reduction of staff may have been formulated by an organization's executives, but the workers whose jobs are about to be deleted from the table of organization may know nothing of these plans nor of the length of time their employment might continue. Ambiguity in a given position may result either because information is nonexistent or because existing information is inadequately communicated.

Experienced ambiguity is a state of a person. It is the expected consequence of objective ambiguity, but the relationship is less than perfect. A person's perception of his environment and his knowledge of the implications of his behavior may not adequately reflect the real world. His cognitive orientation may be clear and differentiated or blurred and beclouded. In general, we expect considerable correspondence between objective and experienced ambiguity, and in this study we have chosen to concentrate on the ambiguity experience. We expect also that the greater the experienced ambiguity, the more the person experiences tension and anxiety. There are, of course, individual differences in the tendency to respond negatively to ambiguity. Frenkel-Brunswik (1949) investigated a dimension of personality which she called *intolerance for ambiguity*. Cohen, Storland, and Wolfe (1955) developed a measure of *need for cognition*—a need (differing in strength from person to person and varying through time depending on state of arousal) for clear, orderly, and meaningful cognitive experiences. When this need is strong, the person is not only intolerant of ambiguity but strives actively for clarity and structure. This need is no doubt instrumental to the gratification of other needs; need gratification and goal attainment are facilitated by a clear perception of the external world and a confident anticipation of future events. The working hypotheses of this research are that individuals differ in the degree to which the ambiguity experience is a source of strain, but that it is generally stressful and creates various manifestations of strain.

Important Areas of Ambiguity in Occupational Roles. A person may be uncertain about many facets of his social or physical environment. In organizations there are several frequently encountered areas of ambiguity which people often find stressful. All too often people are unclear about the scope of their responsibilities; they simply do not know what they are "supposed" to do. When people know what to do, they do not always know how. Such uncertainties may arise because the expectations defining the role are themselves vague and inconsistent.

People may also be uncertain as to whose expectations they are required to meet. A person may be unable to distinguish between his legitimate role senders and others whose expectations he can safely ignore. Moreover, to the extent that secondary ambiguities center around available channels of communication and techniques of influence, the person will not know how to resolve the primary ambiguities from which he suffers.

Ambiguity increases as objects and events recede in space and time,

and most people have learned to accept this fact. We are seldom very clear about the long-range consequences of our actions for the organization as a whole. We may also be uncertain about the shorter-range effects of our behavior on the achievement of group goals or on the well-being of our associates. Perhaps more distressing are ambiguities about the immediate consequences of our actions for ourselves. Doubts about how others evaluate us, about how satisfied they are with our performance are frequent sources of anxiety. A meaningful and satisfying self-identity rests in part on clear and consistent feedback from those around us. Such feedback is also important if one is to anticipate accurately the rewards and punishments he might receive from his associates. Thus, for many purposes, information about the interpersonal climate and about the appraisal of one's performance may be as important as knowing the specific content of the job.

So far, we have discussed ambiguity in terms of the availability of needed information, a condition which to some degree characterizes every position in an organization. Although the crucial question here is the extent to which information required at each focal position is available, there are many different causes which can produce this common effect. The ambiguity of a given position may result from the fact that required information is not available anywhere in the organization, or the information may be available at some point in the organization but not in the role set of the focal position for which the information is required. Coming closer to the focal position, we find cases in which required information is available in the role set but is not communicated to the focal person, as when subordinates withhold information from a disliked or untrusted superior. Even when one or more members of the role set attempt to communicate information, the potential for ambiguity remains. The communication process between any pair of persons may be characteristically clear or unclear, and any message may be fragmentary or garbled. Finally, where several role senders are communicating to the focal person regarding the same condition or event, the messages may be contradictory and thus produce confusion and uncertainty. This last form of ambiguity links the concept closely to that of role conflict.

To summarize, role ambiguity is conceived as the degree to which required information is available to a given organizational position. To the extent that such information is communicated clearly and consistently to a focal person, it will tend to induce in him an experience of certainty with respect to his role requirements and his place in the organization. To the extent that such information is lacking, he will

experience ambiguity. The relationship between the objective condition of ambiguity and the intensity of the ambiguity experience for a certain person will be modified by various properties of personality. The ambiguity experience is predictably associated with tension and anxiety, however, and with a reduction in the extent to which the demands and requirements of the role are successfully met by the role occupant.

Theoretical Model of Factors in Role Conflict and Ambiguity

An adequate understanding of processes of adjustment to stresses in organizations must take into account many factors. Organizations are complex, and the interdependencies among members are potent and subtle. The personalities of members, especially those whose adjustments are to be investigated, must be considered, as must be the pattern of social relations. Processes of communication and social influence are of major concern, as are the intrapsychic processes involved in coping with psychological conflict, tension, and anxiety. Moreover, these many variables tend to be related in complex ways. A theoretical model, providing a general orientation to the interactions of the major groups of variables, is essential. Figure 2-1 presents the core of such a model, built around the notion of a role episode: that is, a complete cycle of role sending, response by the focal person, and the effects of that response on the role senders.

The four boxes represent *events* that constitute a role episode. The arrows connecting them imply a causal sequence. Role pressures are assumed to originate in the expectations held by members of the role set. Role senders have expectations regarding the way in which the

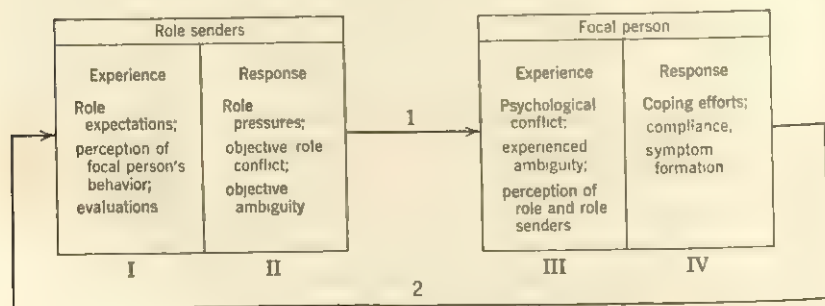


Figure 2-1. A model of the role episode.

focal role should be performed. They also have perceptions regarding the way in which the focal person is actually performing. They correlate the two and, further, exert pressures to make his performance congruent with their expectations. These pressures induce in the focal person an experience which has both perceptual and cognitive properties, and which leads in turn to certain adjustive (or maladjustive) responses. The responses of the focal person are observed by those exerting the pressures, and their expectations are correspondingly adjusted. Thus for both the role senders and the focal person, the episode involves experience and response.

The episode starts with the existence of a set of role expectations held by role senders about a focal person and his behavior on the job.* The experience of the role senders includes perceptual, cognitive, and evaluative components. Speaking of role senders as a group is a matter of convenience. In fact, each role sender behaves toward the focal person in ways determined by his own expectations and his own anticipations of the focal person's responses. Under certain circumstances the role sender, responding to his own immediate experience, expresses his expectations overtly; he attempts to influence the focal person in the direction of greater conformity with his expectations. It is not uncommon for a role sender to be relatively unaware that his behavior is really an influence attempt. Even mild communications about actual and expected role performance usually carry an evaluative connotation. It is an assumption of our research that, in general, role expectations are communicated; more specifically we assume that role expectations lead to role pressures, but that there is no simple correspondence between them.

To determine the likelihood and nature of sent role pressures, the expectations of each role sender must be investigated separately. To understand the degree of conflict or ambiguity in the role, the total pattern of such expectations and pressures must be considered. A thorough investigation into all the role expectations held at a given moment by all the members of the role set should yield an indication of the potential in the situation for conflict. The actual degree of objective role conflict will depend on the configuration of role pressures actually exerted by role senders on the focal person. His experience of this conflict will in turn depend upon its objective magnitude and on certain characteristics of the focal person himself. Similarly, the potential degree of clarity or ambiguity in a role can be assessed by investigating the availability of relevant information within the role set.

* Role expectations, of course, have their antecedents, but these will be considered later as the model is extended.

The degree of objective ambiguity for a focal position will depend, of course, on the availability of that information to the position. The experienced ambiguity of the occupant of that position will reflect the objective situation as it interacts with relevant properties of the person (for example, need for cognition).

Direct Effects of Role Pressures

Arrow 1 indicates that the total set of role pressures affects the immediate experience of the focal person in a given situation (box III). This experience typically has both perceptual and cognitive aspects. It would include, for example, the focal person's perception of the demands and requirements placed on him by his role senders and his awareness or experience of psychological conflict. In general, we expect the focal person's experience of a situation to be a function of the objective demands and pressures to which he is subjected at that moment. When his associates are generally supportive of his present performance, we expect that fact to be so perceived and the response to be primarily one of satisfaction and confidence. When pressures from associates are especially strong and directed toward changes in the behavior of the focal person, or when they are contradictory to one another, the experience is apt to be fraught with conflict and ambiguity and to evoke responses of tension, anger, or indecision. These, however, are general predictions; we do not expect them to hold alike for all focal persons.

The specific reactions of each focal person to a situation are immediately determined by the nature of his experience in that situation. For example, the likelihood of his attempting rational problem solving will depend on the opportunities he perceives for creating acceptable changes in the situation or in his own behavior. On the other hand, as conflict and tension become more severe, he is more likely to become ego defensive and to fall back on other coping techniques, some of which may be maladaptive in the long run because they tend to create greater pressures or increased tension.

The person who is confronted with a situation of role conflict must respond to it in some fashion. One or more role senders are exerting pressure on him to change his behavior, and he must cope somehow with the pressure they are exerting. Whatever pattern of response he adopts may be regarded as an attempt to attain or regain an adequately gratifying experience in the work situation. Of special significance to us are certain identifiable coping responses. These include direct at-

tempts at solving the objective problem by compliance or by persuading role senders to modify incompatible demands. Coping also takes the form of attempts to avoid the sources of stress, and to use defense mechanisms which distort the reality of a conflictual or ambiguous situation in order to relieve the anxiety of the undistorted experience. There is also the possibility that coping with the pressures of the work will involve the formation of affective or physiological symptoms. Regardless of which of these defenses, taken singly or in combination, that the focal person uses, his behavior can be assessed in relation to the expectations and sent pressures of each of his role senders.

Effects of Response on Role Expectations

The degree to which the focal person's behavior conforms to the expectations held for him at one point in time will affect the state of those expectations at the next moment. If his response is essentially a hostile counterattack, his role senders are apt to think of him and behave toward him in ways quite different than if he were submissively compliant. If he complies partially under pressure, they may increase the pressure; if he is obviously overcome with tension and anxiety, they may "lay off." In sum, the role episode is abstracted from a process which is cyclic and ongoing: the response of the focal person to role pressures "feeds back" to each sender of those pressures in ways that alter or reinforce them. The next role sendings of each member of the set depend on his evaluations of the response to his last sendings, and thus a new episode begins.

In order to understand more fully the causal dynamics of such episodes and their consequences for the person's adjustment, the model must be extended to include three additional classes of variables—organizational and ecological factors, personality factors, and the character of interpersonal relations between the focal person and his role senders. Taken in combination, these factors represent the context within which the episode occurs.

At this point we move to a somewhat different level of analysis. In Fig. 2-1 the boxes represent events, that is, occurrences at a given moment in time. The directed lines represent a causal sequence: sent pressures (II) lead to experienced conflict (III), which leads to coping responses (IV); these are perceived and evaluated in relation to expectations (I), and the cycle resumes. Figure 2-1 also forms the core of Fig. 2-2. However, the circles in Fig. 2-2 represent not mo-

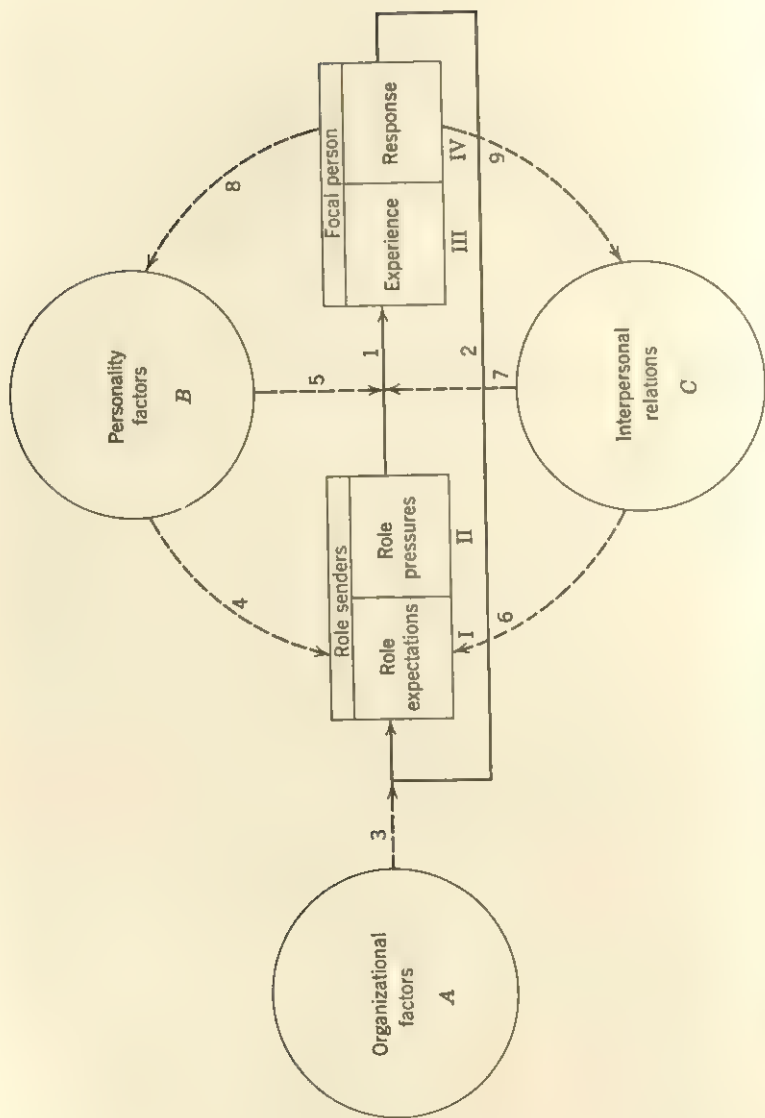


Figure 2-2. A theoretical model of factors involved in adjustment to role conflict and ambiguity.

mentary events but enduring states of the organization, the person, and the interpersonal relations between focal person and role senders. An analysis of these factors will make more understandable the sequence of events in a role episode. The properties and traits making up the organization, the person, and social relationships are for the most part abstractions and generalizations based upon recurrent events and behaviors. For example, characterizing a relationship as friendly means simply that the parties to the relationship think well of each other and behave in a pleasant supportive manner toward one another. Such repetitions and patterns of behaviors and events provide a basis for understanding each new event.

Organizational Antecedents of Roles

To a considerable extent, the role expectations held by the members of a role set—the prescriptions and proscriptions associated with a particular position—are determined by the broader organizational context. The organizational structure, the functional specialization and division of labor, and the formal reward system dictate the major content of a given office. What the occupant of that office is supposed to do, with and for whom, is given by these and other properties of the organization itself. Although other human beings are doing the “supposing” and the rewarding, the structural properties of organization are sufficiently stable so that they can be treated as independent of the particular persons in the role set. For such properties as size, number of echelons, and rate of growth, the justifiable abstraction of organizational properties from individual behavior is even more obvious.

The organizational circle (*A*) in Fig. 2-2, then, represents a set of variables. Some of them characterize the organization as a whole, for example, its size, number of rank or status levels, the products it produces, or its financial base. Other variables in this set are ecological in that they represent the relation of a certain position or person to the organization, for example, his rank, his responsibilities for certain services in the division of labor, or the number and positions of others who are directly concerned with his performance.

Arrow 3 asserts a causal relationship between various organizational variables and the role expectations and pressures which are held about and exerted toward a particular position. For example, a person in a liaison position linking two departments is likely to be subjected to many conflicting role pressures because his role set includes persons in two separate units, each having its own goals, objectives, and norms.

In general, the organizational conditions surrounding and defining the positions of one's role senders will determine in part their organizational experience, their expectations, and the pressures they impose.

Personality Factors

The term personality (circle *B*) is used broadly to refer to all those factors that describe a person's propensities to behave in certain ways, his motives and values, his sensitivities and fears, his habits, and the like. Such factors affect role episodes in several ways. First, some traits of the person tend to evoke or facilitate certain responses from his role senders (arrow 4). For example, a volatile, aggressive personality may elicit strong pressures because only strong pressures have a lasting effect on him, whereas a more rigid person may so successfully resist influence that many associates give up trying to influence him. Second, it is likely that some persons will experience role pressures differently from others (arrow 5); that is, personality factors will act as conditioning variables in the relationship between the objective and experienced situations. For example, a highly sensitive person may experience more emotional tension under mild pressures than a more thick-skinned person will under intense pressures. Finally, we are interested in the extent to which personality predispositions lead to the use of certain kinds of coping responses. The intrapunitive person may blame and hold himself responsible when faced with conflict and frustration; an aggressive, extrapunitive person would perhaps respond to the same situation with overt aggression against others whom he tends to blame for his difficulties. Preferences for certain styles of coping with tension and anxiety also tend to be rooted in personality structure. In sum, personality factors are seen as important determinants of both differential elicitations of role pressures and differential reactions to role pressures.

Interpersonal Relations

The term interpersonal relations shall refer to the more or less stable patterns of interaction between a person and his role senders and to their orientations toward each other. These patterns of relationships may be characterized along several dimensions, some of them stemming from the formal structure of the organization, others from informal interaction and the sharing of common experiences. The following dimensions are seen as particularly important in the present context: (1) *power* or ability to influence; (2) *affective bonds*, such as respect,

trust in the cooperativeness and benevolence of the other, and attraction or liking; (3) *dependence* of one on the other; and (4) the style of *communication* between the focal person and his associates.

As Fig. 2-2 indicates, interpersonal relations (circle C) fulfill some functions parallel to those described in connection with personality factors. The kind of pressure exerted by role senders upon the focal person depends to some degree upon the nature of relations between them (arrow 6). Role senders who are superior in the formal hierarchy will present their demands in a different manner from subordinates or peers. Pressures will also be interpreted differently depending on the relationship between focal person and role senders (arrow 7). For example, pressures from relatively powerful associates arouse more tension than similar pressures from others. Finally, the nature of a person's behavioral reactions to a given experience may be affected by interpersonal relations in the situation. For example, such coping responses as overt aggression may be virtually ruled out when the pressures are exerted by a hierarchical superior.

Coping Responses and Feedback Cycles

Reactions to conflicts may produce changes in other sets of variables in Fig. 2-2. The extent to which a focal person complies with his role senders' demands is one example of his behavior that will directly affect future role-sending behavior (arrow 2). When he is seen as resisting influence, the pressures upon him may be temporarily increased; when he is seen as unable or unwilling to comply with the requirements of his job, a whole new set of pressures may be brought to bear. Another kind of feedback occurs when the focal person attempts to initiate communication with his role senders about the problems he encounters in the performance of his job; such feedback may lead to immediate modifications in the demands that are made of him, to changes in informal collaborative arrangements, or even to alterations in the formal division of labor.

Two other feedback cycles affect the total process of role sending—one through the effects of the focal person's responses upon his own personality, and one through the effects of his responses upon his relations with each of his role senders. For example, immediate changes in the focal person's feelings and behavior toward his role senders (arrow 9), such as a loss of trust or respect, are likely in the long run to create significant changes in the enduring pattern of relations between them. Such a change in interpersonal relations will in turn affect future role sender behavior (arrow 6) as well as the focal person's

response to it (arrow 7). Three kinds of reactions seem of particular significance in this process. First, tensions and frustrations of the focal person may arouse in him hostile feelings, which in turn give rise to aggressive actions and communications to his role senders. Second, the focal person may attempt to reject or avoid those role senders whose demands he has difficulty in meeting. As with hostility, his rejection and withdrawal may or may not reduce his difficulties, depending on how his role senders respond in return. Finally, the response of the focal person to a situation of conflict may be to approach his role senders, increasing the effectiveness of communication with them and perhaps the likelihood of joint problem solving.

Certain reactions to role experiences also may lead to modifications in the personality organization (arrow 8) of the focal person. Such changes may be symptomatic of good or bad mental health, affecting his ability to carry on all the normal functions of living. They may also have specific effects upon his performance in the work situation, including his ability to handle pressures and tension. Imagine, for example, a person whose continual inability to meet the demands of his environment threatens his self-esteem. In attempting to cope with the anxiety aroused by this threat, he may be forced to rely more and more on the use of defense mechanisms that distort the realities of his situation, so that his behavior becomes less and less adaptive (arrow 5). Other kinds of changes in the person, such as changes in his level of aspiration or the development of symptoms of ill health, may affect his associates' behavior toward him directly (arrow 4), creating a change in the role pressure.

Both adjustive and maladjustive cycles are comprehended by this framework. That is, we have considered cycles in which responses to role experiences increase the likelihood of future experiences which are basically pleasant and gratifying or basically unpleasant and frustrating. The model will be utilized and developed further as research findings are presented. It is presented here to provide a way of thinking about a large set of factors and conditions in complex interaction. The model becomes a theory when the specific variables in each panel are delineated and the causal connections among them are specified.

Summary

Organizations consist ultimately of the patterned and concerted activities of their members. Thus considered, each individual's *role* in the organization consists of his part in the total pattern of activity.

The study of the impact of an organization upon an individual, therefore, may be approached through the observation of the role behavior of its members as they affect the individual. For any particular person it is useful to restrict our observations to the role behavior of those members of the organization who have direct contact with him in the course of their work, the roles thus selected being labeled a *role set*. It is a key assumption of this approach that the behavior of any organizational performer is the product of motivational forces that derive in large part from the behavior of members of his role set, because they constantly bring influence to bear upon him which serves to regulate his behavior in accordance with the *role expectations* they hold for him.

Students of social behavior have long drawn attention to the high degree of consensus necessary to produce stable role performance in a social system. Nevertheless the integration of such a system need not be complete in order to make effective functioning possible. In modern industrial organizations many instances of incompatibility or unclarity in expectations are known to occur. The occurrence of role conflict and ambiguity in such industrial environments and their effects upon the individual form the subject of these studies.

Conflict and ambiguity tend to pose for the individual special problems of adjustment. How each man feels about these problems and how he reacts to them depends upon two further sets of factors. The first of these is his personality, considered as a set of predispositions formed throughout his previous life history. The second includes all his contemporaneous relationships with the members of his role set. Both these sets of factors will affect the behavior of his role senders toward him. Both will also tend to condition his reactions to conflict and ambiguity, and both, finally, may themselves be modified by the particular coping patterns he adopts in response to role conflict and ambiguity of long standing.

3

Research Approaches to Role

Conflict and Ambiguity

THE RESEARCH DESIGN developed to study problems of role conflict and ambiguity stems directly from the requirements of the theoretical model summarized in Fig. 2-2. A major implication of that model is that the perceptions and behavior of role senders should be measured independently of the perceptions and behavior of the focal person toward whom they are oriented. We cannot be content to measure the behavior of role senders in terms of the perceptions of the focal person, since we are committed to the hypothesis that his perceptions are affected by the state of his interpersonal relations with role senders and by aspects of his own personality. Indeed, we expect that some of his major defenses against a difficult situation will involve perceptual distortion.

Moreover, we are committed to treating role expectations not as a homogeneous body of content encountered by the focal person, but as consisting of discrete and varied perceptions and behaviors of individual role senders. For these reasons, a major requirement of design was that role sets should be identified, and that data should be separately collected from the focal person and each member of his role set. These requirements in turn have an implication for design: they imply an intensive rather than a broadly representative design, since the costs and logistic problems in locating and interviewing role senders for a national sample of focal persons would be astronomical, at least in terms of the limited astronomy of contemporary social research.

Other aspects of our theoretical approach, however, urge a representative, large-sample design. We value the confidence which such a design provides for generalization, and we are skeptical about the

extraction of social-psychological generalizations from small, unrepresentative samples. Moreover, our model emphasizes the importance of surrounding conditions in understanding the effects of role conflict and ambiguity on the focal person. These conditions inhere in the organization, in the personality of the individuals involved, and in the interpersonal relations of the focal person and members of the role set. To some extent the effects of such factors can be anticipated, and the necessary measurements for estimating them can be built into an intensive design. To the extent that such factors cannot be foreseen and measured, however, they can nevertheless be given appropriate representation by means of a probability sample.

With these disparate requirements in mind, we developed a paired research design for the study of conflict and ambiguity: a design which involved an intensive study of focal persons and role senders, and a national survey in which each respondent was treated as a focal person. In the intensive study, all the seven panels of variables stipulated in our theoretical model (Fig. 2-2) were measured, and data were obtained separately from each focal person and each role sender. Moreover, data about the organizations in which they were located were independently obtained from official records and other sources. This study was followed by and matched to a national survey in which the major measures of the intensive study were repeated and the findings of the intensive study replicated, except that each respondent served as the data source for himself as focal person and as informant about the behavior of his role senders and the characteristics of his organization.

The Intensive Study

The basic commitment for the intensive study was to produce a design in which we could determine for a limited number of (focal) positions the role expectations held by all relevant role senders. These data, together with the responses of the occupants of the focal positions, would permit us to define and measure role conflict in terms of expectations (sent role), independent of the representation of those expectations in the mind of the focal person.

Given this decision, the following problems remained to be faced:

1. Selection of the offices to be studied (focal offices) and the organizations which contained them.
2. Identification of the set of role senders for the occupant of a particular office.

3. Collection of data from role senders and office occupants so as to permit comparisons among the expectations of individual role senders.

4. Determination of the hypothetical effects of role conflict and ambiguity to be studied.

Selection of Focal Offices

We made an initial decision to limit the number of focal offices to about fifty. This number represented a compromise between aspirations and resources, but was large enough to permit statistical analyses and to allow some purposive diversity in the selection of organizations and offices. We decided to restrict the intensive study to business and industrial organizations, and to attempt to locate the research in several companies of distinctly different technologies. We also chose companies in somewhat different competitive situations in their respective industries. In all, we selected and were given access to seven industrial locations in the oil, automobile, electronics, and machine parts industries. These companies differed considerably in the types of operations in which they engaged. The companies in the oil industry were engaged in oil winning and marketing on a world-wide scale; the automotive and machine parts locations consisted of plants engaged in the highly automated mass production of engines and engine components; the electronics field was chosen primarily to include research and development activities. This diversity of operations could not, of course, provide representativeness; it did provide an opportunity to select a set of widely varying focal positions.

In each location we selected for study a number of offices from the table of organization after some consultation within the company. Again, our major criterion in this choice was diversity. We wanted to include offices from virtually the full range of the hierarchy—corporate officers to production foremen. We excluded nonsupervisory employees because their lack of subordinate role senders makes their situation significantly different from all ranks of supervision and management. At each echelon we attempted to select a wide range of positions with respect to organizational function—staff and line, professional and administrative, office and factory. Insofar as any information was available to us, we tried to include positions which reputedly differed in degree of role conflict; we did not want to be led only beside quiet organizational waters. Where a number of individuals occupied very similar offices in the table of organization (e.g.,

*Table 3-1 Summary of Focal Office Characteristics*¹

<i>Approximate Level in the Organizational Hierarchy</i>	<i>Operations</i>		
	<i>Head- quarters</i>	<i>Manufac- turing</i>	<i>Research and Development</i>
Division managers	4	—	—
Department managers	15	1	1
Section managers, superintendents and general foremen	5	6	5
Foremen, unit heads	—	15	1

¹ Figures in cells indicate number of offices selected. Total $N = 53$.

production foremen), a random selection was made among them. To avoid the possibility of overlap among role senders, focal offices in the same organization were selected from different departments.

The characteristics of the 53 offices thus selected, thereafter dubbed *focal offices*, are summarized in Table 3-1. All the focal office occupants were male. Their ages ranged from 25 to 59 years, with modal age in the late thirties. The method of making contact with the occupants of focal offices differed somewhat from location to location. Generally we asked to be introduced into each department by the personnel manager, and then to be left to present our own case. To the best of our knowledge there were no refusals to participate. Following this initial contact, an interview with the focal person was arranged. At the beginning of each interview the purposes of the study were again explained and the respondent's consent obtained before proceeding.

Selection of Role Senders

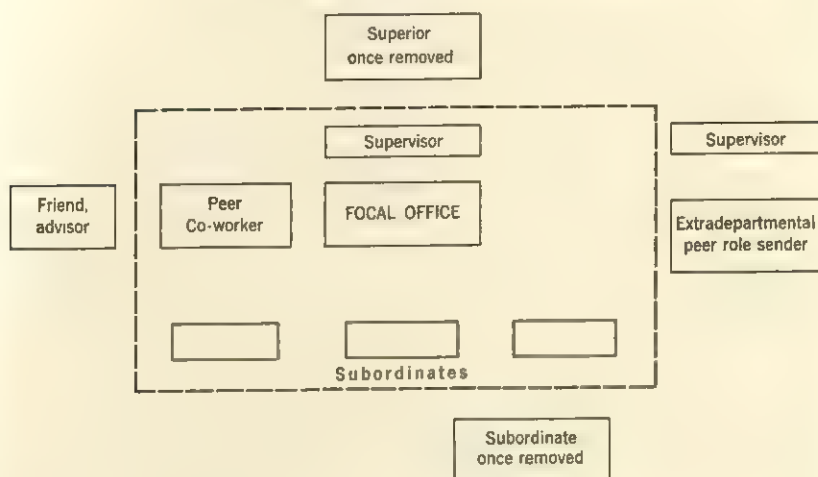
In theory the population of role senders for a given focal office is readily defined: it includes all persons whose expectations are relevant to the performance of the focal role. Ideally we would like to pick up the organization by the focal office in which we are interested and see to what other offices it is connected, as we might pick up a net by one knot and discover to what others it is tied.

In practice the problem in identifying role senders was to determine that set of persons whose behavior was likely to have major influence on the content of each focal role, and to do so without inter-

viewing every person in the organization. Our approach was to begin with the structural facts of organization and to look for role senders in positions defined by the authority structure and the work-flow structure, or division of labor. These we thought would lead us to persons who had both the need and the power to be influential. Thus immediate *supervisors* were always selected, on the basis of our a priori judgment that they were likely to be important role senders. Similarly we always selected direct *subordinates*, since their functional interdependence with the focal person was likely to make them both concerned with his performance and influential in it. Other *superiors*, such as the supervisor's own superior, were routinely selected, although the focal person was asked about the amount of direct contact with such superiors-once-removed and whether he considered them important in determining how he performed his job. *Peers* of the same organizational rank as the focal person were selected if they were adjacent to him in the work-flow structure or if evidence of direct contact existed and the focal person considered them influential; similar criteria were used for selecting other role senders in more distant parts of the organization. Role senders who were peers in and outside the department of the focal person were alike in that they did not stand in any formal authority relationship to him; instead they tended to be related to the focal office in terms of the work-flow system. Occasionally a focal person would describe in his initial interview a person in the organization with whom he had no formal relationship, but whom he regarded with particular respect or with whom he was especially friendly. When we received indications that such persons were acting functionally as role senders, advising or commiserating with the focal person, we included them as role senders.

A focal person and his role senders have been referred to as a role set. Figure 3-1 depicts the composition of such a set in a space defined by a vertical dimension representing the organization's hierarchy and the space between boxes providing some approximation to organizational distance. Distance is defined in terms of the number of organizational unit boundaries between two offices. Thus the distance between the focal office in our illustration and the peer co-worker (who by definition belongs to the same organizational unit) is less than that between the focal office and any offices outside the unit (extradepartmental role senders). Another way of measuring organizational distance is in terms of the number of levels one has to go up the hierarchy before two offices are linked by a common superior.

The number of role senders selected for a single focal position was limited to ten for reasons of administrative convenience. For focal



Key:
 ——— Boundary of work unit

Figure 3-1. Composition of a hypothetical role set.

persons whose lists of possible role senders exceeded ten, this limitation required selection of a few rather than all subordinates. Such selection was done randomly. For a few focal persons with exceptionally long lists of role senders, we first excluded senders whose frequency of interaction with the focal person was very low, and then proceeded as usual. A total of 381 role senders was finally interviewed, constituting an average of about seven role senders for each focal person in our 53 role sets.

Method of Role Analysis

A major goal of the design was to facilitate the drawing of conclusions about the conflict and ambiguity of each focal position from the total set of expectations held by the role senders for that position. To accomplish this, we needed to assure ourselves that data elicited from different members of a role set could be meaningfully compared. In addition we faced the problem of collecting data so as to make quantitative comparison *between* role sets possible, a requirement which ruled out a strict case study approach. The method best suited to these purposes was to specify in advance a number of dimensions of role behavior, such that a role sender could simply indicate "where" on the dimension he would prefer the focal person to be. At the same

time the dimensions to be used would have to be applicable to a wide variety of roles. Thus we were led to restrict dimensions for analyzing role behavior to those commonly used and easily understood by the general population, and to devise ways of introducing into the interviews references to the actual content of a specific focal role, such that role senders could define their expectations in terms of familiar and observable behaviors.

The most adaptable unit of analysis seemed to be the molar *activities* which the focal person had to perform to meet the expectations of role senders and fulfill the requirements of office. For example, the office of foreman on assembly line *B* in plant *X* entailed for its occupant a stable and finite set of activities in which he engaged with some regularity; these activities included "assigning men to positions on the line," "seeing that each man completed his task at the proper speed," "teaching new men how to do the job," and "trouble shooting when any member of the group was in difficulty." The drawback to describing a role in terms of its activities is the difficulty of choosing the optimal size of an activity. If one chooses a very fine unit of description, the list becomes very long, its organization becomes obscure, and the analysis for which it is to be used becomes more complicated. In choosing a rather broad unit, however, one may gloss over many of the controversial details about which role senders differ and around which are generated the problems of conflict and ambiguity we wish to study. In addition to this considerable difficulty, different kinds of roles seem to require units of different conceptual size for meaningful description. For example, the work of assembly line foreman is sufficiently routine and specified so that a rather detailed behavioral description can be obtained, but a description of the work of a major executive in units of equivalent size becomes nearly meaningless, because the nature of his work tends to be less routine and the nature of his responsibilities more global. His activities are more varied and the goals he is expected to achieve may be reached by a greater variety of means.

The method we chose to use depended heavily on the phenomenology of the focal person and did not wholly resolve the dilemma of unit size. A list of activities was obtained from each focal person during an initial personal interview. Although the interviewer encouraged the respondent to provide a detailed description of his job, the choice of a unit of description was left to the respondent. The list of activities obtained from each focal person was subsequently presented to his role senders. Thus it was possible to obtain each role sender's expectations about the activities of the focal person. The variables and

indexes constructed from these data will be presented in greater detail in later chapters.

Two other aspects of the focal person's role behavior were studied. The first of these is the *style* of his role performance. The term style here refers to outstanding tendencies in the behavior of a focal person irrespective of the particular activities in which he is engaged. Thus we may wish to characterize a person's behavior as highly assertive or rather retiring, resistant to control or easily influenced, impulsive or deliberate. Although we are used to thinking of such behavior tendencies as primarily determined by personality predispositions (hence consistently evident across all roles enacted by one person), it is easy to observe that prescriptions about styles of behavior are in fact applied to behavior in a particular role. In other words, role senders differentially sanction various styles of enacting a role, although we do not know the extent to which their preferences with respect to style are role specific. Role senders were asked to describe what styles they preferred the focal person to follow, using a 22-adjective checklist, and then were asked to contrast their preferences with the actual behavior of the focal person.

The third area of exploration of focal roles concerned *normative behavior*. By this we mean behavior in response to aspects of organizational life which are not role specific but are more general, perhaps organizationwide. The facts of supervision, association with others, company policies, promotions, and the like typically involve norms and behavior in conformity with them. Role senders were presented with a series of prescriptive statements such as "(The focal person) should carry out orders even if he thinks they are unsound" and "(He) should defend his co-workers from criticism by superiors." They were asked to respond to each statement by indicating whether they thought the focal office occupant ought to do (or avoid doing) what the rule specified. Again we were concerned here with detecting what behavior was considered appropriate for the person in the focal position, but the statements were designed to be applicable to all organizational positions.

To summarize, we set out to measure the expectations of role senders with respect to focal persons in such a manner that comparison of data from different role senders and about different focal roles would be possible. Three elements of role performance were selected for study: (1) the *activities* of the role, (2) the *style* of the focal person's performance, and (3) the general organizational *norms* he might be expected to adhere to. It is around these elements that we sought to measure conflict and ambiguity in 53 focal roles.

Measuring the Effects of Role Conflict and Ambiguity

Another major problem in design concerned the selection of variables descriptive of the effects of role conflict and ambiguity. Although we were ultimately concerned with effects upon mental health, the breadth of problems included under that rubric necessarily dictated the choice of a few out of many possible consequences for the person.

The variables used to describe the focal person in this study fall into two classes. The first describes the adjustment of a focal person to his work role. Included in this class are the amount of tension he experiences in connection with his work, the balance of satisfaction-dissatisfaction he feels about it, and the quality of his interpersonal relations on the job. All variables in this class are responses to the job. The second class of variables describes more general and presumably stable characteristics of the person, that is, basic properties of personality. These variables can be thought of both as factors that modify a person's adjustment to his role and as response tendencies that represent his adjustment to the sum total of his life circumstances. In Part V we will deal specifically with the measurement and analysis of major personality variables as factors mediating the relationship between role conflict and ambiguity, and the responses of the focal person.

Data Collection

The data on each role set were collected in the following manner. First, the focal person was interviewed to obtain a list of his activities and to determine his role senders (Focal Interview I). Next, each of his role senders was interviewed. When these interviews had been completed, the focal person was interviewed for a second time (Focal Interview II), primarily to obtain his perceptions of the role senders' behavior and his responses to the stresses of his role. Finally, each focal person was asked to complete a Person Description Form (personality inventory), which he returned to the research staff at his convenience. In all, the process of data collection required some four to six hours of time from each focal person, and one to two hours from each role sender.

Interviewers were given systematic practice with the instruments they were to use. This was provided in part by the pretest study, but a day of practice preceded the start of interviewing at each location. Focal interviews were usually taken by members of the research staff, role sender interviews by members of the field staff of the Survey

Research Center. Focal interviews were tape recorded; interviews with role senders were recorded verbatim by each interviewer.

Interview materials are presented in Appendixes O, P, and Q.

Focal Interview I. The first interview with the focal person had several purposes: to identify role senders, to obtain an activity list, and to obtain an assessment of the relationship of the focal person to each of his role senders. We have already described the procedure for identifying role senders in each cluster and for obtaining a list of activities from the focal person. Collecting further information about his relationships with role senders was necessary in order to develop a full description of his *received role*. We asked each focal person why interaction between him and each role sender occurred at all, what sort of response each role sender expected or pressed for from him, and how clearly this expectation was communicated. We asked how difficult the focal person found it to comply with such expectations, how well he felt he knew the role sender's evaluation of his performance, and whether he had difficulties in communicating with any role senders. This series of questions was supplemented by a set of rating scales on which the focal person rated his frequency of communication with each role sender, the amount of importance he attributed to him, how well he liked him, whether he respected his knowledge or advice, and how much confidence and trust he could place in the role sender's cooperation. In addition to describing his received role for us, the focal person contributed a good deal of information on the quality of his *interpersonal relations* with role senders.

The last section of the initial interview asked the focal person for an over-all evaluation of his role in terms of *conflict*, *ambiguity*, and *tension*. On a series of simple quantitative rating scales, he was asked to evaluate the clarity of his job definition, his uncertainty about limits of his own authority and the expectations of others, the incidence of contradictory or conflicting demands from role senders, and the amount of pressure he felt for changing either the quality or quantity of his work. Our measure of job-related tension consisted of 14 statements covering a wide variety of job-relevant problems; the focal person was asked to indicate the degree to which he was bothered by each of them. These items had been developed and used in a similar way in other studies conducted by the Survey Research Center (Gurin, Veroff, and Feld, 1960). The interview concluded with a brief inquiry about demographic characteristics of the respondent.

Role Sender Interview. Broadly speaking, the role sender interview was designed to measure the magnitude and direction of pressures that each role sender was trying to exert upon the focal person. In doing

so the interview schedule covered the following areas, all as perceived by the role sender:

- description of job duties and activities of the focal person
- role sender's relationship to the focal person
- evaluation of the activity list provided during Focal Interview I
- attempts to influence the focal person
- normative behaviors to which the focal person should adhere
- preferred style of performance for the focal person
- demographic and personal data about the role sender

In view of their importance in the subsequent analysis, the procedures used to measure role senders' expectations for the focal person merit further discussion here. A list of activities of the focal person, obtained in Focal Interview I and arranged in random order, was presented to each role sender. For each activity on the list, the role sender was asked to what extent it concerned him in the performance of his own job (functional dependence). For those activities which affected his own job, he was then asked whether or not he wanted the focal person to perform this activity in any way differently. If the role sender indicated that he desired a change in performance of the focal role, he was asked to describe what changes he wanted and what attempt he had made to influence the focal person in this direction. After all the activities on the list had been canvassed in this manner, the role sender was given an opportunity to add to or subtract from the content of the list. Finally, he was asked to indicate his wishes about the focal person's allocation of time among activities and his ordering of activities in terms of their importance.

The approach to role senders inquired intensively into their dissatisfactions with the present performance of the focal person as it appeared to them. In conceptual terms we were interested in pressures on the person to change his performance; measuring these primarily in terms of sender dissatisfaction involves the assumption that a role sender's desires for change are somehow translated into influence attempts, social pressures upon the focal person. This assumption was bolstered by qualitative data from role senders about their attempts to implement desired changes in the behavior of the focal person. Moreover, the assumption that desires for change would generate pressures for change is a conservative one with respect to our major hypotheses. To the extent that role senders give no expression to their wishes for the focal person or turn the expression of those wishes to people other than their logical target, the relationships between the behavior of role senders and the responses of the focal person are reduced.

The measurement of pressures upon the focal person to change his style of performance was done similarly to the measurement of pressure to change the content of activities or the allocation of time among them. The first instrument used for assessing pressure to change style was a list of 22 adjectives. Role senders were asked to describe the degree to which each attribute was characteristic of the *ideal* occupant of the focal office. Next, using the same list, they indicated the degree to which each attribute described the *actual* occupant of the office. Discrepancies between the ideal and the actual description were taken to be a measure of the sent pressure upon the focal person to conform to the ideal. In addition to this checklist, each role sender was asked an open-ended question about the ways he wished the focal individual to be different "as a person."

Quantitative measures from each of these areas were obtained from each role sender. These measures were then combined for each role set into an index of pressures from each role sender toward changes in the behavior of the focal person. A general index of such sent pressures was then constructed for each role set by averaging the scores of the role senders for each focal person. This general index represents the measure of role conflict for that person (Appendix C).

None of the elements of this index is derived from the focal person himself. Rather, each is based on data obtained from the persons in the work situation who are exerting pressures on him. Since these pressures are directed toward changing his behavior, which we regard as determined by the resultant of a field of internal and external forces, the strength of the combined pressures toward change may be considered an index of role conflict.

The final area of role analysis, concerned with norms regarding organizational behavior, consisted of a straightforward measure of how strongly each role sender wanted the focal person to adhere to each of a series of rules of behavior the interviewer presented to him. The total list was divided into two subsections, one concerned with rules applicable to supervisory behavior, the other containing rules that were applicable to all roles.

Focal Interview II. The second focal interview was designed to cover five areas regarding the adaptation of the focal person to his role and his response to role pressures.

1. Sources of satisfaction and dissatisfaction in the job; identification of specific aspects of the job which lead the focal person to evaluate it positively and negatively. This typically provided a wealth of information about personal needs and values which are particularly salient on the job.

2. Conditions of person-role fit; consideration of (a) various personal properties (talents, skills, knowledge, character traits, etc.) which the respondent feels are important for performing his particular job, (b) his evaluation of himself regarding these personal properties, and (c) his general assessment of the suitability or appropriateness of his personality to the requirements of his role. This discussion frequently produced significant material about self-identity structure, self-confidence, and self-esteem.

3. Long-range career history and aspirations; detailed accounting of the sequence of jobs the person has held since completing his education, including a consideration of reasons for major employment or career changes, and a prolonged discussion of past and present career aspirations. In addition to information about personal ambitions and aspirations, this usually provided indications of feelings of success or failure, job involvement or apathy, and self-confidence.

4. Sources of stress on the job; discussion of conditions or events which the person sees as stressful or leading to tension, and his emotional reactions when confronted with stress. This part of the interview included a detailed description of a "typical bad day" on the job and, where he could recount it, the description of an episode of major stress in his recent work life. These questions provided information about environmental circumstances which are generally stressful, and indicated areas of special sensitivity or concern in the individual.

5. Techniques for coping with stress; following from and, in some respects, merged with the discussion of sources of stress, a series of intensive questions was used to elicit information about tactics or behaviors by means of which the focal person copes with stress or handles its emotional consequences.

An outline of open-ended questions was used to stimulate discussion of these topics. Each question was followed by a series of probes intended to facilitate the respondent's presentation of a comprehensive, detailed, and well-rounded sketch with respect to these five aspects of his life at work.

This deeper, qualitative interview material was used in two ways in the analysis. It provided the basis for detailed case analyses. Liberal use has been made of quotations from these interviews, and comprehensive analyses of six cases are presented in Chapter 18.

In addition, a content analysis of the interview protocols permitted the coding of several quantitative variables which could be used in statistical analyses. For some variables, where inference or interpretation seemed to be essential to reflect an underlying dimension, the

quantification was obtained via judgments by coders who were trained and experienced in clinical psychology and personality theory.

Detailed descriptions of these variables will not be given here; such descriptions are presented in the several chapters where each variable is introduced and discussed. Three of them—self-confidence, sense of futility (vs. personal effectiveness), and apathy (vs. involvement)—are used primarily as dependent variables and will appear in Part II. Those dealing with major motivational orientations are presented in Part V.

Personality Inventory. The personality inventory included 323 items, representing 23 standardized questionnaire scales and two scales developed for use in this study. Twenty of the scales included in this instrument were measures of personality variables. All of these were selected on the basis of their demonstrated internal consistency or factorial purity, and because considerable validating research was available for them. The remaining scales measured satisfaction with the job, confidence in the organization, frequency of physical complaints related to strain, and the degree to which the respondent recalled his childhood as unpleasant. The first two indexes were developed at the Survey Research Center and used in a variety of studies of organizations; the index of physical complaints derives from a factor analysis by Gurin, Veroff, and Feld (1960) of a group of self-reported symptoms that in earlier studies had been found to discriminate between psychologically ill and normal persons. There was also included a "lie scale" similar to that of the MMPI (Minnesota Multiphasic Personality Inventory).

National Survey

A nationwide survey of role conflict and ambiguity was undertaken to complement the approach and findings of the intensive study of focal persons and their role senders. The complementarity lies in the ability of the intensive design to illuminate the dynamics of role sending and the ability of the survey design to indicate the extent of justifiable generalization of such findings. In addition, the national survey serves an epidemiological function.

Relatively little is known about the prevalence of job-related tensions in the population at large. With the exception of one national survey of mental health (Gurin, Veroff, and Feld, 1960) and some limited and variable community studies, information on work-induced tensions is available only for highly selected, unrepresentative groups,

such as employees of a particular company or patients at a certain clinic. Moreover, the descriptive task—delineating the extent of the problem—can be readily extended to locating particular segments of the population which are most affected. Such location begins with the simplest of demographic comparisons and can involve a very sophisticated form of analysis. The comparative distribution of conflict, ambiguity, and their sequelae has value also for suggesting explanatory hypotheses about the origins of such conditions. For all these reasons, we proposed to replicate on a national sample of the adult population as many measures from the intensive study as could be adapted to survey procedures.

The design of the national survey utilized the multistage probability sample developed in the Survey Research Center (Kish, 1953). This sample includes all of the 12 largest metropolitan areas in the country and a sample of all other counties, rural and urban. Within the sample counties blocks or segments and ultimately dwelling units and individual respondents are selected with known probability.

In this study respondents were chosen to represent all adults over eighteen years of age who were living in private households. Interviews were conducted with 1300 such persons. For purposes of the present analysis, however, we are interested in those people in the sample who reported that they usually work for pay and who were working more than 20 hours per week at the time of the survey. The total number of such people is 725.

The major variable in the survey is a revised version of the index of job-related tensions which has already been introduced.* As in the intensive study, an index score was constructed by adding responses across items. In the survey the total thus obtained is divided by the number of items answered. This was done because a number of respondents, notably those who are self-employed, regarded one or more items as inappropriate to their work; the average score per item provides a better basis for comparing scores of such individuals with those who answered the entire list.

The items making up the tension index were correlated with each other as well as with the index score. When these correlations were compared with those obtained in the intensive study they were found to be generally similar.

The major analyses of the survey data involve the relationship of a series of hypothesized causal or locational variables to the tension index,

* Based on our experience with the earlier version of the index, three items of the original fourteen were dropped and five new items added, making a list of sixteen tension items in all (Appendix I).

or to components of it. In the national survey, the "explanatory" variables used in the analysis of the tension scores and other indicators of strain are mainly organizational and demographic. In addition data were obtained on some hypothesized consequences of tension, including self-reports of health and absence from work. The relations between these variables and the demographic variables of age, sex, education, and employment status are presented in full in Appendix B.

In keeping with the over-all design of these paired studies, the results are reported together throughout this book. Whenever there are findings from the national survey which corroborate (or challenge) the results of the intensive study, they are presented and discussed in context. All tables are marked to indicate the source of the data they present. In these ways we hope that the reader may be helped rather than encumbered by the duality of this research design.

Summary

With the growth of social psychology as an empirical discipline, the researcher-turned-writer is apt to feel it his duty to tell the reader not only *what* he has concluded but also *how* he has learned it. The present chapter conforms to this notion in its presentation of the strategy and tactics of the research which forms the basis of this book.

The findings to be reported in the following chapters are based upon two related projects. One was an intensive series of case studies of 53 selected individuals in six industrial locations. The other was a national survey of 725 persons, representing that portion of the labor force of the United States employed during the spring of 1961.

Most of the techniques used in these studies have by now gained enough currency to be familiar to the general reader in the social sciences. Two aspects of the design, however, deserve special note. One is the decision to obtain information on role expectations for the focal persons from members of their role set. The first of two lengthy interviews with the focal person served to identify his major role senders. The wide-ranging discussion of his conception of his job and his feelings toward it, which constituted the second of the two focal interviews, is in each case complemented by the role senders' own account of their expectations for and behavior toward the focal person. Taken together, these interviews yield a comprehensive description of the work environments of each of the 53 individuals selected for study; they also provide the data needed to construct an objective index of role conflict.

Although the intensive study is case oriented, great care has been exercised to obtain data sufficiently comparable from role set to role set to permit the coding and statistical analysis of important common variables. Nevertheless there are limitations inherent in a study so focused upon person-to-person relationships among a small, nonrepresentative sample of individuals. Accordingly, the intensive study was complemented by a national survey. This second study serves to test the generality of some of our findings concerning organizational determinants of role conflict and ambiguity, as well as to provide some estimate of the prevalence of such problems.

A large number of variables were measured in the intensive study, pertaining to the individual's reactions to his job environment, his interpersonal relations, his personality predispositions, and various attributes of his job. The major variables with which this study is concerned are the individual's *location in the organization*, the *pressures* exerted upon him by his role senders, and the *emotional tensions* he experiences in connection with his work. In the national study, of course, no data from role senders are available. The major variables in that study concern the respondent's *job-related tensions* in relation to various *attributes of the job and the organization*.

PART TWO

Consequences of Role Stress

In Chapters 4 and 5 we will begin to explore the consequences of role conflict and ambiguity. What are some of the common types of conflict and ambiguity encountered in industry? How prevalent are such problems at work? How are these problems experienced by the individual and how does he adjust to them? These are the questions that will be taken up first. In terms of the model sketched in the preceding chapters, these questions are concerned primarily with the events in a typical role episode without reference to differences in personalities, interpersonal relations, or other qualifying factors.

Role conflict and ambiguity exact a price, both in terms of individual well-being and organizational effectiveness. To speak of personal and organizational "costs" in this context is no mere figure of speech. For the organization, as Likert (1962) has argued, the morale of the many groups and individuals that make up its human complement is properly regarded as an asset. The depletion of such human assets, it

has been demonstrated, reduces the organization's effectiveness in a number of different ways, all of which ultimately affect the balance sheet by which an industrial organization judges its operations. Although there is no simple calculus available for the personal side of the ledger, it is hard to avoid the impression that often the most telling costs are borne by the individual employee and his family.

In arguing that the consequences of conflict and ambiguity are by and large unfavorable, it is not necessary to adopt the view that conflict is necessarily harmful. To regard conflict simply as a disruption of an otherwise harmonious way of life is to overlook the fact that conflict often provides the basis for individual achievement and social progress. The same can be said for ambiguity, for while ambiguity implies a disorderliness that is antithetical to the very idea of organization, it also permits a kind of flexibility that can facilitate adaptation to changing circumstances. We may thus ask whether some amount and some forms of conflict and ambiguity are not desirable in organizations. To answer this question, however, requires that still other problems be faced. What is desirable by one standard may be most undesirable by another. A form of role conflict and a way of coping with it may increase the effectiveness of an organization but be detrimental to individuals. For example, a problem of chronic overload may be "solved" by persistent overwork and unpaid overtime. In terms of short-run costs of production this condition is advantageous; by other standards it is not.

In short, to specify some degree of conflict or ambiguity as desirable for an organization involves comparisons and choices among values: stability versus progress, orderliness versus flexibility, organizational effectiveness versus individual welfare. Such choices are implicit even in attempts to evaluate the effects of conflict and ambiguity; since all the ramifications can never be traced, we choose the criteria in terms of which effects will be studied. In the chapters that follow, the emphasis is largely upon individual adjustment to the job. This is only one of the values that need ultimately to be considered, but it is one which is often neglected in a preoccupation with short-term organizational efficiency and it is one about which there is still a great deal to be learned.

4

Role Conflict

ONLY ONE out of six men in the labor force of the United States reports being free of tension on the job. For some, of course, the tensions are relatively mild and can readily be taken in stride. But for many the tensions are sufficiently severe to impose heavy costs for the person and for the organization in which he works. Because role conflicts constitute a major source of such tensions, this chapter is devoted to a more detailed analysis of the nature and immediate consequences of role conflict. Later chapters will investigate some of the sources of conflict and explore intensively the dynamics of conflict episodes for particular persons. But let us first consider briefly the scope of the problem in industry today as revealed by the survey of the American labor force.*

In Chapter 2 several types of role conflict were identified, differing with respect to the forces induced on the person and the conditions under which they are likely to arise. Nearly half of the male wage and

* Due to the method of selecting respondents used in this survey, people who constituted one-person family units were sampled at twice the rate of people in multiperson family units. To adjust for this sampling bias, responses from people in multifamily units were weighted by a factor of two whenever a finding was to be used descriptively to characterize the population of American adults over 18 years of age who were part of family units living in private households. In the present report such descriptive statements are always based on such weighted data; tables with statistical tests of associations between variables, however, employ unweighted data.

To facilitate comparison with the intensive study, national sample findings for male wage and salary workers only are presented in the body of this report. Data on females and self-employed males may be found in Appendix B.

salary workers in our national sample are confronted with *inter-sender* conflicts: 48 per cent report that from time to time they are caught in the middle between two sets of people who want different things from them, and 15 per cent indicate this to be a frequent and serious problem. Thirty-nine per cent report being bothered at times by thinking that they will not be able to satisfy the conflicting demands of various people over them.

Table 4-1 indicates the variety of sources of opposing role pressures in *inter-sender* conflicts as reported by respondents in the national survey. Only those respondents who report having such conflicts are rep-

Table 4-1 Matrix of Inter-Sender Role Conflicts¹ (from the national survey, weighted)

First Party to Conflict	Second Party to Conflict						
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
(a) Management or company in general	2%	5%	8%	3%	20%	17%	2%
(b) Person's direct supervisor(s)	(5)	4	8	8	3	7	1
(c) Co-workers within organization	(8)	(8)	3	—	—	—	2
(d) Person's subordinates	(3)	(8)	(—)	—	—	1	—
(e) Union or its representatives	(20)	(3)	(—)	(—)	—	—	1
(f) Extraorganizational associates ²	(17)	(7)	(—)	(1)	(—)	2	1
(g) Other (family, friends, etc.)	(2)	(1)	(2)	(—)	(1)	(1)	2
Totals (%) ³	57	36	21	12	24	28	9

¹ The column and line headings indicate persons or groups whom the respondents identify as contributing to inter-sender conflicts. Cell entries reflect the percentage of all those reporting conflict who feel "in the middle" between the two groups defining the cell.

² Extraorganizational role senders include such business contacts as clients, customers and suppliers, and outsiders who have regulatory or advisory relations with the company.

³ Totals represent the percentage who report the person or group at the head of the column to be a party to the conflict, regardless of who represents the other party. Figures in parentheses below the main diagonal repeat corresponding cells above. Total $N = 259$; "no conflict" and "not ascertained" cases are omitted.

resented there; entries in the cells indicate the percentage of cases in which the opposition is between members of the categories which the row and column represent. Several points of interest are to be found in this table.

First, the importance of organizational superiors is clearly evident; combining categories (a) and (b), 88 per cent of all inter-sender conflicts involve pressures from above. This is hardly surprising since the major directives and constraints in one's role come down the chain of command. Fifty-seven per cent of the respondents speak of these pressures from above as coming from some impersonal source—"the company" or "management." Thirty-six per cent, still a substantial number, implicate their own direct supervisors. By contrast, only 12 per cent of the conflicts involve pressures from the person's subordinates, and these are almost always in opposition to pressures from superiors. In evaluating this finding, however, one must bear in mind that most people in the labor force hold nonsupervisory jobs and have no subordinates.

Intraorganizational conflicts—those involving pressures that stem from within the organization—account for 41 per cent of the inter-sender conflicts reported. All but 3 per cent involve superiors, and 25 per cent involve the person's direct supervisor as one party to the conflict. The following cases represent examples of intraorganizational conflicts.

Production control supervisor—We have to control material and there's a difference between what production control wants and what the superintendent and management want.

Truck driver—The dispatcher dispatches trucks at a certain time. The store manager wants the goods delivered at a certain time. So, the driver is in the middle between the two.

Electronics technician—I was transferred from one department to another and there is conflict between the two departments. My loyalty should lie with the second department, but it lies with the first.

Assistant art director, advertising department—Salesmen request special types of promotional material. My boss feels that it's not desirable. So, I'm not pleasing our salesmen in this respect.

Design engineer—It's between what the engineers want and what the shop people want.

Even more common are conflicts induced in part by pressures from persons or groups outside the organization—59 per cent of all inter-sender conflicts reported in the national survey. Two major forms are common: those involving pressures from labor unions or their repre-

sentatives (24 per cent) and those in which outside business associates play a part (28 per cent). The following examples illustrate difficulties stemming from union-management conflicts.

Pipefitter—Between union and management. Can't do electrical work like management wants—I have to get an electrician to do that or break the contract with the union.

General supervisor, automobile assembly—Management demands certain work standards and union rejects them. I'm right in the middle.

Machine operator Production rate used to be 330 units per hour, the women worked hard and could do that. Since we made 400 they've changed the production rate to that, and the women can't get 400. That bothers me because the union *and* the women hold it against us for getting 400.

Relations between customer and company often contain the seeds of role conflict, as indicated in the following cases.

Oil furnace repair man—Between the office and the customer—customer may feel she's entitled to one thing; office says she's not; I have to explain to customer.

Drug store manager—In between help and owner, customers and boss. How much credit to allow—it's something all the time.

Farm machinery mechanic—Between customers and boss on free service. Also, two girls in the office will promise repair service involving me for the same time.

Waitress—Customer is supposed to be right but boss sometimes thinks *he* is, and you're in the middle.

Pharmacist—A doctor will write a prescription and tell the patient it will cost "x" amount of money, but I have to charge "y" amount to stay in business—this makes the patient unhappy. Also, one neighbor benefits from some medicine so another wants me to give her the same thing. I must use my judgment and try to tell her it might not be good for her.

Salesman—A customer will want a better price. I can't do it but feel it should be better and management won't allow it.

Similar problems are found for those who deal with special kinds of clients.

Teacher—Between parents and administration. Occasionally I have to carry out orders that parents and children do not like but those in authority request it—discipline and retention of first graders.

Physician at U.S. Public Health Hospital—Employee with the company—patient and the company, I'm in the middle. Coast guardsmen want

me to tell them they are ill—Companies want me to say they aren't ill
—I'm constantly in a dilemma.

Role overload stands out as another type of role conflict confronting sizable numbers in the labor force. Forty-five per cent of male wage and salary workers indicate being disturbed about "feeling that (they) have too heavy a workload, one that they can't possibly finish during an ordinary work day," and 43 per cent are distressed by "thinking that the amount of work (they) have to do may interfere with how well it gets done." An accounting manager summarizes well, "I have more work to do than I can get done well enough to satisfy my standards of quality."

Person-role conflicts—conflicts between the demands of the role and such personal properties as needs and values and personal abilities—also apparently arise in substantial numbers. "Feeling that you have to do things on the job which are against your better judgment" is a source of some concern to 45 per cent of the men in our sample, and some 22 per cent are bothered by "feeling that (they) are not fully qualified to handle (their) jobs." The data for women show similar patterns, although the percentages are somewhat smaller. Consider the following cases.

Waitress—I'm often troubled because a customer comes in and spends but he also misbehaves. (She has to be pleasant to people who make degrading advances toward her.)

Social worker—In the area of personnel standards and practices, there is a conflict between the Board's policies and the employees' aspirations.

Secretary—Sometimes it's hard to make the younger ones see things the way we older ones do. Our experience has taught us certain things and sometimes the younger generation think their way is best. (This woman is conflicted because in fact she fears her younger co-workers may be right and that her skills are becoming obsolete.)

Conflicts within the structure of the work role are major sources of stress, but conflicts also arise between the work role and other roles of importance both to the men and to society in general. Nearly a third of the men in the national sample are at times disturbed by the extent to which their jobs interfere with their family life. Thus, *inter-role* conflicts are also found in significant numbers. In Table 4-1, the 9 per cent category (g) is largely of this nature.

In short, there is substantial evidence to indicate that problems of occupational role conflict abound in America today. For many these problems stand as minor and occasional irritants. Many others face

them as chronic stresses. And for some the personal costs reach disastrous proportions.

The Nature of Role Conflicts in Industry

If problems of conflict are ubiquitous in our complex industrial society, they are also extremely varied and highly personal. The most troublesome features of a conflict situation confronting one person may be quite unlike those facing another, even if the individuals occupy similar positions in industry. Although we can identify common types of role conflict, in many respects each conflict episode is unique. Situations differ in significant ways, and the idiosyncrasies of the person facing the conflict add to its uniqueness (see Part V). Such differences are vividly illustrated in the case materials.

Let us begin with the description of a form of conflict familiar to students of industrial management, illustrated by the plight of a production foreman in a large manufacturing plant. Foreman's major responsibility is to keep a given sector of the production line operating at a level of efficiency specified by persons higher in management. Here is his description of a typical incident in the performance of his job.

The chief (union) steward was off for about three or four days, and in the time he was off everything was running smoothly. I had broken a record as far as production went on my line, but actually there seemed to be some hard feelings among some fellows whose jobs preceded it. (Ed. note: Men whose work had to be completed before the workers in Foreman's sector of the line could start their work.) Every day one of the fellows in particular would get in there and break his back just to get over 400; in other words, if we get 400, that's considered a good day's work, and we were hitting 443, 417, and so on, day in and day out. Today the steward came in and he got wind of what this fellow was doing, and he went up there and scared the daylight out of this fellow. Gave him some kind of warning that I never got the full dope on, but it got back to me, with the understanding that he told him, "Don't you dare go over 400 or run 400 any more." So naturally I contacted this steward. We had a big row and he was calling me names and saying it's a dirty lie and stuff like that. I said "No, it isn't; you got this man in there scared; in fact, he hasn't even hit production. Production is 431 on that job. (Ed. note: The official production standard is 431.) When he hits 400 I don't see why it is any of your business to argue with him and scare him like that." And I got hold of my general foreman, and he talked to them on the side and it came out that he had told this fellow

that the boys are mad at him getting so many of them and they're going to meet him at his union hall or something like that. And like I say, my general foreman is wonderful at things like that; we got that thing straightened out and he (the steward) went back and apologized to the boys.

Note that the episode starts with a conflict for the worker created by the contradictory demands of Foreman for a high rate of production and the Union Steward for a rate that will permit others along the line a more relaxed pace. But the conflict soon turns to focus on Foreman himself.

Q: From the things you said you want to keep on good terms with the men.

A: That's the truth. The reason I'm saying that, as you know I've been broken four or five times, and that's a big scare right there for the simple reason that I've previously been warned regarding tussles with the steward. (He said) "I'll remember this when you come back down to production." In other words, when we got out of salary and back down to production (Ed. note: Many foremen are temporarily demoted by this company during periods of heavy lay-offs.) we have to be OK'd by the union in order to get back to our job again. So you're in the middle there and you don't know what you're going to do. I may be here a day, a month, a year, I don't know, and all of a sudden they don't need me any more, and I go back to production and the union don't want me. That's not only with me, but a lot of supervisors are shaky on that point . . . we have no backing whereas the workmen have the union to back them up, the foreman has nothing. You're either a good Joe or you're just out.

This case is classic in its simplicity. Foreman is faced with two sets of role senders who want quite incompatible things from him, and each has considerable power over him. Foreman rides a delicate balance between these two sets of pressures, attempting to be both "a good Joe" to those in the union and, to his superiors, a respected foreman who gets his production out.

A personal factor also deserves note: Foreman has a problem controlling his temper. Describing himself as a person who likes competition and bargaining, he frequently finds his job placing him in situations where he feels anger and is provoked to express it. However, expressing anger is both dangerous and to some extent guilt-producing. The interviewer notes that "Foreman is quite anxious about sickness and accidents on the job. He regaled me with anecdotes about workmen dropping dead on the floor or being mauled by machines." Fore-

man himself says that he frequently has to leave a situation "to get himself under control" and that he is likely to have arguments with his wife after a tense day on the job. In short, the conflict that characterizes Foreman's job poses two problems for him: that of *performing* in such a way as to minimize disapproval from his role senders, and that of coping with the *emotions* (and their social and psychosomatic consequences) generated at work.

It is fitting to begin with a case in which the psychological conflict for the person stems from the broader social conflict between union and management. Just as a major function of management is to induce workers to perform effectively for the organization, a major function of unions is to protect workers from undue influence, from inductions which may reach exploitive proportions. In some respects, conflict is the essence of union-management relations. Moreover, such conflict is not restricted to the bargaining table and the picket line. The pressures and counterpressures are played out in the daily lives of thousands of workers and supervisors.

Nighter is a general foreman in an automobile engine assembly plant, a supervisor of several foremen and their crews on the evening shift. He is also confronted by incompatible demands from different role senders, but the source of the conflict is quite different from that of Foreman. Nighter reports directly to and is supervised by the superintendent of the evening shift; the scheduling of the assembly line, however, is drawn up by people on the day shift, and work orders are passed on to Nighter by his day-time counterpart. Except during periods of very heavy production, the night shift is scheduled to fill the feeder lines so that the day shift can complete the total assembly process without delays for restocking components in the feeder lines. As in many production plants, managers at each level are rewarded in part according to their rates of production. Facilitating the productivity of the day shift gains far less recognition for the evening superintendent than producing a large number of completed engines during his own shift. In Nighter's words:

All the superintendent of the second shift out there wanted was blocks. He didn't give a damn how the day shift wanted to operate. He wanted blocks off the line. He wanted to see a big count. He didn't give a damn how the hell I got them. Then when I'd strip the end of the (feeder) line, the next day I'd be called into the office. They would ask me how come I'd stripped the lines out. I wouldn't point a finger at anybody. I'd tell them, "to get the blocks."

Q: What do you do to handle that sort of thing?

- A: Well, it's something like a rose between two thorns here. You try to take as much out and still try to maneuver the thing so the lines look full, you know what I mean, but you're not helping the situation any. Then you gotta say so and so told me to do this. Well, the day shift superintendent says, "I told you to do it this way. Why didn't you follow it?" Well, I'm working for both of you. Then he might say, "Who the hell are you going to satisfy?" and I would say, "That's what I want to know." This guy here, if you said he told me to take it, then he'd say, he didn't take that crap, see? Do what the hell he told you, never mind pointing a finger at him.
- Q: Did you ever tell them that you couldn't figure out what you were supposed to do?
- A: Well, at the time this was going on was when this new stir up was coming in here, and I don't know what the hell all was involved in it, so the only thing I could do was to try to do a job and try to hold my job. In spite of everything I'm not a quitter. I'll scrap anybody.
- Q: Anything else that you thought of doing to handle that kind of conflict?
- A: Oh, you can do a lot of thinking but you just have to go out there, wish for the best, that's about all you can do. You are just helpless there at the time.

Nighter is caught in the unenviable position of having two powerful and ambitious bosses who have vested interests in the way he performs his job. If he satisfies one of them, he must incur the wrath of the other. What makes this situation even more devastating is that neither of his bosses is willing to face and try to resolve the conflict they are creating, leaving an essentially helpless Nighter to absorb the tensions and pay the costs.

Lest we conclude that conflict is the exclusive domain of foremen, let us look at a problem faced by Handler, a middle-management executive responsible for the storage and movement of materials in and out of a manufacturing plant. Perhaps the single most important aspect of his job is accomplishing this task at the lowest possible cost to the company. But several proposals for drastic changes in present methods were opposed by others whose own methods of operation or vested interests would be affected, although it was clear the proposals would have led to considerable reduction in costs. When Handler was asked how much pressure he felt upon him to improve the quality of his work, he responded:

Well, that's difficult for me to answer, because—I don't know how to put this—the only thing I can tell you is the quality of my performance

is never challenged. . . . But my own personal opinion is that the quality of my performance is not good.

Q: In what sense?

A: In the sense of not being able to justify my own existence. I have a feeling of why the company pays me a salary and why I have my job. . . . To me if we cannot show a dollar cost saving in the improvement of operations, then we are just overhead. And because of reasons that I believe are beyond our control, we have not been able to manifest the savings that I think we should.

Perhaps Handler's conflict can be characterized in the following terms: Do the job in the most economical fashion, *but* don't change the way we are doing things now. Nevertheless the pressure for cost reduction continues and is usually absorbed by reductions in Handler's requests for staff or equipment.

Here is a case in which a broad objective, supported by all major role senders, is frustrated by opposition to specific proposed plans of action. Handler's feelings about the inconsistency between the performance goals demanded of him and the means allowed to him, however, are exacerbated by his own standards for performance. As an engineer trained in the movement of materials, he has strong internalized standards about the way his assignment should be carried out. Thus, even though many of his role senders by implication want only minor changes in the situation, he feels conflicted between continuing to press for the substantial changes in material handling which his own standards require, and merely administering the existing program with minor improvements outside the area of controversy.

Even this brief sampling of a few problem cases gives ample evidence of the highly variable and personal nature of conflict. Many factors in the organizational environment and in the personalities of the focal person and his role senders may contribute to the generation of conflict. A similar range of variables affects the personal and organizational costs of conflict, and the ease or difficulty with which it yields to solution. To understand the dynamics of conflict requires an intimate familiarity with specific details of the individual case. However, several important generalizations are possible without doing violence to the unique qualities of individual cases. This investigation is based on the premise that an intensive analysis of individual cases, coupled with a quantitative statistical analysis of general trends, yields a more comprehensive and systematic understanding of the processes through which conflicts arise, are resolved or unresolved, and take their toll.

Let us note three generalizations about the nature of role conflict:

(1) Conflicts about what a person should do typically generate con-

licts *in* the person; contradictory pressures from the environment give rise to psychological conflicts in the person. (2) The needs and values and capabilities of the person contribute to the conflict just as do the environmental pressures. (3) The conflict is generated by pressures or forces *toward change* in the way the role is performed. The conflict arises because the status quo is unacceptable either to the role occupant or to some of his role senders. This property of role conflict is so central and pervasive that it is tantamount to definition.

Personal and Organizational Costs of Conflict

Some of the conflicts described above may seem petty and transient at first glance, hardly matters for major concern. All of us are faced with minor conflicts and frustrations throughout our lives and we seem to take most of them in stride. One might well make a case for interpreting some conflict as essential for the continued development of mature and competent human beings. Why, then, such concern about role conflicts in industry? What are the consequences of conflict which need to be understood and dealt with?

Answers to these questions are strikingly apparent, but also in some respects subtle and complex. Of most immediate concern are the personal costs of excessive emotional strain. Of more far-reaching import, perhaps, is the fact that common reactions to conflict and its associated tensions are often dysfunctional for the organization as an ongoing social system and self-defeating for the person in the long run. Let us look more closely at the evidence for these conclusions.

Tension, Dissatisfaction, and Inner Conflicts

Various forms of emotional turmoil—anxiety, tension, frustration, and a sense of futility—have long been associated with psychological conflict. These symptoms should be similarly related to objective role conflicts to the extent that these conflicts are internalized, that is, to the extent that the objective role pressures generate conflicting psychological forces in the person. Some evidence for this qualifying phrase is given in Table 4-2(a). In this and the following tables, the sample of focal persons from the intensive organizational study has been divided at the median on the composite index of role conflict. The mean intensity of experienced conflict, as judged from the protocols of the second interview with focal persons, is substantially higher for those in high conflict roles than for those who face little or no en-

vironmental conflict. In fact, only 28 per cent of those in low conflict roles mention any feelings of conflict in the open-ended interview, while 58 per cent under high conflict discuss such problems and frequently point to them as being severe and taxing. The presence of conflicting role expectations in one's social environment tends to produce internal motivational conflicts. Persons so exposed tend to be conflicted in the psychiatric sense of the term (Horney, 1945), as well as in the social-psychological sense in which role conflicts are defined.

The presence of conflicting role pressures may influence the affective experience of the person in a variety of other ways as well. Table 4-2(b) indicates that tension (Appendix I) associated with various aspects of the job increases under high degrees of conflict. Under such conditions the person tends to worry more about and feel more bothered by various conditions and events in his work life than does one whose role involves less conflict. Moreover, role conflicts tend to reduce one's general satisfaction with the job [Table 4-2(c)] and the conditions surrounding it, and to undermine one's confidence in his superiors and in the organization as a whole [Table 4-2(d)]. These data are based on standardized attitude scales developed in earlier industrial research by the Survey Research Center and are presented in full in Appendixes K and L. The attitudes reflected are important components of employee morale and have been shown under certain conditions to have significant effects on work performance, absenteeism,

Table 4-2 Emotional Reactions to Role Conflict (from the intensive study)

<i>Emotional Reaction</i>	<i>Degree of Role Conflict¹</i>		
	<i>High</i>	<i>Low</i>	<i>p²</i>
(a) Intensity of experienced conflict	3.3	1.9	<0.07
(b) Job-related tensions	5.1	4.0	<0.03
(c) Job satisfaction	4.4	5.6	<0.02
(d) Confidence in organization	5.7	7.3	<0.001
<i>N³</i>	(27)	(26)	

¹ The index of role conflict is described in Chapter 2 and in Appendix C.

² The *p*-values are based on *t*-tests of differences between means.

³ The total *N* for the intensive study is 53. Occasional non-response to individual items creates small reductions in the effective *N* for certain specific comparisons.

and staff turnover. It is clear that chronic conditions of conflict in one's work role tend to be demoralizing as well as tension provoking.

But the evidence for the emotional costs involved in role conflicts goes well beyond the data presented in Table 4-2. More intense and debilitating emotional reactions are sometimes found. Some people experience a rather marked sense of futility when confronted with conflict. A loss of self-esteem is often apparent. Others show symptoms of acute anxiety, and of confusion and indecision, which may leave them immobilized for a time. And for a few, symptoms of hysteria and psychosomatic disorders seem to be connected to the tensions engendered by role conflicts.

A more detailed treatment of these reactions to conflict will be presented in subsequent chapters. For the present it is sufficient to conclude that role conflicts tend to be quite stressful for those who face them, and at times the emotional strain reaches serious proportions.

Interpersonal Relations and Communication

The impact of role conflicts only begins with the emotional experience of the person. Unfortunately, the effects of conflict also carry over into one's interpersonal life. Social relations with one's work associates tend to deteriorate under the stress of conflict. In part, this reaction reflects the person's general dissatisfaction with the work situation. Attitudes toward those role senders who create the conflict become worse, just as do those toward the job and the organization in general.

Three types of such attitudes toward role senders were measured: trust, respect, and liking. Each focal person was asked the following questions concerning his role senders: "Suppose you were having some sort of difficulty in your job. To what extent do you feel each of these people would be willing to go out of his way to help you if you asked for it?" (Trust)

"We all respect the knowledge and judgment of some people more than others. To what extent do you have this kind of respect for each of these people?" (Respect)

"How well do you like each of these people personally?" (Liking)

Each focal person was presented a series of fixed alternatives with which to answer these questions (Appendix O). A role-set average for each of these attitudes was then obtained by taking the mean scores for trust, respect, and liking over all interviewed role senders in a particular role set. These averages were subsequently converted by means of a linear transformation to an eight-point index representing

the degree to which a particular person tended on the average to trust, respect, and like his role senders.

The evidence in Table 4-3(a) should come as no surprise. When role senders impose conflicting pressures on the focal person, it is little wonder that his trust in their cooperativeness is undermined. Under conditions of high conflict there is apt to be little indication that others are looking out for one's welfare; the focal person may well doubt that they would be willing to go out of their way to help him. In the extreme case his doubt goes well beyond the reality of his associates' untrustworthiness. Something akin to paranoid suspiciousness may develop, in which the person attributes to his associates more base intentions toward him than they in fact hold. Even short of this extreme reaction, the absence of trust makes it unlikely that the person will openly seek help from his senders toward finding a mutually satisfactory resolution to their conflict. Some substantial degree of mutual trust is required for free and open communication and for integrative problem solving.

Table 4-3(b) and (c) give still further reason to doubt that constructive collaboration and coordination will be forthcoming in the face of strong role conflicts. Not only does the focal person under conflict trust his role senders less, he also likes them less well personally and holds them in lower esteem. But the problem extends beyond the affect and perception of the person into his overt behavior. People communicate less with their associates when under strong conflicts than when they are relatively free of them [Table 4-4(a)]. This would be expected, considering the weakening of such affective interpersonal bonds as trust, respect, and attraction. There is also a direct instrumental reason for this curtailment of communication. Role pressures

Table 4-3 Interpersonal Consequences of Role Conflict (from the intensive study)

<i>Interpersonal Bond</i>	<i>Degree of Role Conflict</i>		
	<i>High</i>	<i>Low</i>	<i>p</i> ¹
(a) Trust in senders	4.5	5.8	<0.01
(b) Respect for senders	4.2	5.9	<0.001
(c) Liking for senders	4.8	5.2	<0.05
<i>N</i>	(27)	(26)	

¹ The *p*-values are based on *t*-tests of differences between means.

Table 4-4 Interactional Consequences of Role Conflict (from the intensive study)

<i>Interaction Variable</i> ¹	<i>Degree of Role Conflict</i>		
	<i>High</i>	<i>Low</i>	<i>p</i> ²
(a) Communication frequency	3.9	5.8	<0.001
(b) Power attributed to others	3.8	5.6	<0.001
<i>N</i>	(27)	(26)	

¹ Indications of interaction between the focal person and his role senders are taken from his responses to the following pair of questions asked about each of his senders: "First, I'd like you to tell me how important each of these persons is in determining how you do your job." (Attributed Power); "How often do you talk with each of them?" (Communication Frequency). The fixed-alternative responses associated with each of these items are in Appendix O. For each focal person the mean Attributed Power and Communication scores were computed over all role senders named by him—a group which included all senders interviewed plus a number not interviewed. Averages of scalar responses were converted by means of a linear transformation of averages for the role set, based on an eight-point scale.

² The *p*-values are based on *t*-tests of differences between means.

are exerted for the most part by oral communications from role senders. When these inductions prove stressful, the stress can be reduced by withdrawing from the inducers, by avoiding interaction with those who create the conflict.

The evasiveness of the conflicted person is further demonstrated by Table 4-4(b). Those in high-conflict clusters attribute less power to their role senders than do those who suffer little conflict. This response appears largely autistic, in view of the substantial evidence that the expectations of senders in high-conflict clusters have a marked effect on the focal person, though it may not be the one these senders intend. They may not gain conformity to their wishes, but they "get through" to him sufficiently to disrupt his emotional life and to elicit strong defensive responses. Attributing less power to one's associates, discounting the importance of their recommendations and directives, is a kind of psychological withdrawal paralleling the social withdrawal of reduction in communication.

There is reason to doubt whether any of these all too common responses to conflict—the weakening of interpersonal bonds, the curtail-

Consequences of Role Stress

ment of interaction, or the denial of power—is truly effective. All make it unlikely that the person under conflict will seek out the counsel and cooperation of his role senders in finding solutions for his problems. It is even less likely that he will volunteer his aid in working on their problems. Resolutions are less probable and the conditions for more serious conflicts are present. We should expect this first because the usual response of role senders to a withdrawal from their influence efforts is to press the point harder. If the focal person does not seem to “hear” what he is being told, perhaps they have to “shout” all the louder—and to invoke stronger sanctions. Second, since the usual affective bonds tend to be replaced by negative feelings, conflicts around new issues are more apt to arise.

The reduction in the person’s cooperative orientation toward others is costly for the organization as a whole as well as for the more immediate group. To the extent that coordination of behaviors within the role set is required for meeting organizational objectives, the effectiveness of the unit is impaired when role conflicts are present. And this is all the more serious because conflicts, through these common reactions to them, beget conflicts; the circle tightens.

Summary

The origins and consequences of role conflict can be summarized by turning once again to the model presented in Chapter 2. (See Fig. 4-1.) Contradictory role expectations (box I) give rise to opposing role

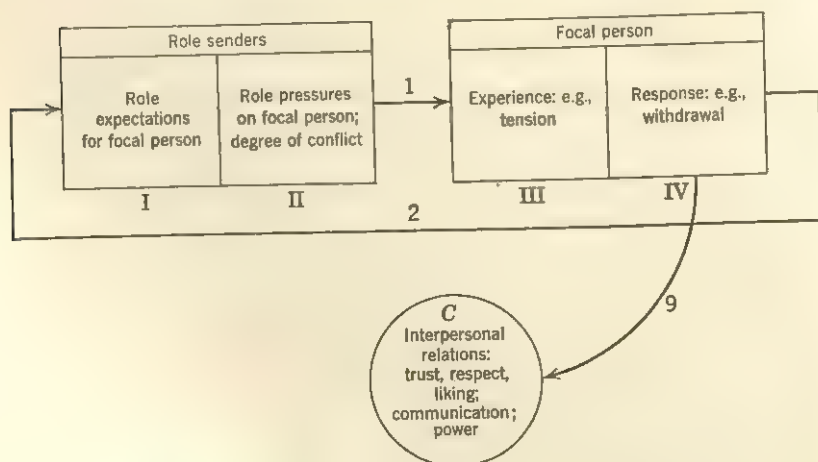


Figure 4-1. Partial model of factors involved in role conflict.

pressures (role conflicts), which generally have the following effects on the emotional experience (box III) of the focal person: intensified internal conflicts, increased tension associated with various aspects of the job, reduced satisfaction with the job and its various components, and decreased confidence in superiors and in the organization as a whole (arrow 1).

The strain experienced by those in conflict situations leads to various coping responses—social and psychological withdrawal (reduction in communication and attributed influence) among them.

Finally, the presence of conflict in one's role tends to undermine his relations with his role senders, to produce weaker bonds of trust, respect, and attraction (arrow 9). It is quite clear that role conflicts are costly for the person in emotional and interpersonal terms. They may also be costly to the organization, which depends on effective coordination and collaboration within and among its parts.

5

Role Ambiguity

LIKE ROLE CONFLICT, role ambiguity is costly for the person and for the organizational unit in which he works. Efficient goal-directed behavior is based on predictability of future events. A person generally has only limited control over future outcomes in which he may have a substantial interest. To the extent that he can realistically anticipate events beyond his control, he can direct his behavior toward producing more rather than fewer favorable outcomes.

Three conditions seem essential in determining such predictability: (1) The person must be able to anticipate with fair accuracy the consequences of his own actions. If he performs act *A*, how sure is he that event *B* (a desired effect) will follow? And how confident is he that *X* (an unwanted event) will not be produced? He needs to have usable knowledge about means-ends connections in situations where he can produce or withhold the means. (2) He needs to be aware of the determinants of relevant events which he does not produce, and of the likelihood of their occurrence. (3) He must be able to depend on the stability of a host of other surrounding conditions, that is, the "ground" that defines the "figure" of the changing events with which he deals directly. For example, everyone depends on the stability of stationary objects and on the reliability of the law of gravity. This chair will hold me just as it has in the past. The panic of an earthquake partially arises from the failure of the natural world, which is taken so for granted, to meet our expectations.

In complex social organizations the degree of predictability, though substantial, is significantly less than that accorded physical events.

In addition to physical laws, a variety of social and cultural conditions must remain constant if people are to behave effectively. Words must maintain their meanings; the rules of the game must remain unchanged or at least intelligible. Changing them changes the world itself—to our delight when Lewis Carroll lets Alice slip through the looking glass, or to our terror when Kafka's metamorphosis confronts us.

The problem of predictability is further complicated for each person in an organization because he is surrounded by other actors who are trying to produce changes which will optimize their own rewards and satisfactions. Their actions represent sources of change over which the person may have little or no control, and which he can predict only in the grossest terms.

But the greatest difficulty may lie in the person's inability to anticipate clearly the consequences of his own acts. Often his goals in organizational life are attainable only if he can influence others to assist him, and interpersonal influence can seldom be accomplished with certainty. Moreover, efforts to produce desired changes in organizations, even when successful, often produce unanticipated secondary changes as well. One is seldom secure in the knowledge that his efforts will produce only those effects he desires and expects.

Clarity and predictability are thus required for effective movement toward goals, and in complex social systems, despite their characteristic emphasis on authority and rule, clarity and predictability are difficult to achieve. When the goals for the person are set by the objectives and requirements of the organization, ambiguity may limit his effectiveness and productivity on the job, as well as his ability to coordinate with others. To the extent that his goals stem from his own needs and values, ambiguity may be a major source of frustration and anxiety. Ambiguity thus poses a problem for both the individual and the system.

Scope of the Problem

Role ambiguity is a direct function of the discrepancy between the information available to the person and that which is required for adequate performance of his role. Subjectively it is the difference between his actual state of knowledge and that which would provide adequate satisfaction of his personal needs and values. Virtually none of us knows *all* that we would like to know about the conditions surrounding our lives. We never predict with absolute certainty how things will turn

out. To some degree, ambiguity is a fact of life for everyone, a condition with which we have become all too familiar. Most of us, however, are able to function reasonably well in our various roles in spite of the uncertainty.

To what extent, then, is ambiguity a problem for general concern? Data from the national survey of the labor force indicate that it is a source of stress for a substantial number of people.*

35 per cent are disturbed by lack of clarity about the scope and responsibilities of their jobs;

29 per cent are bothered by ambiguity about what their co-workers expect of them;

38 per cent are distressed because they cannot get information required to perform their jobs adequately.

While these people report some significant stress because ambiguity interferes with effective task performance, other responses emphasize the personal costs of ambiguity.

31 per cent are disturbed by lack of information about opportunities for advancement in the organization;

32 per cent are under tension because they are uncertain about their superiors' evaluations of them.

But these findings reflect only those cases in which ambiguity reaches admittedly stressful proportions. Other studies suggest that lack of desired information in organizations is even more widespread. A report of factory workers in a heavy industry (Kahn, 1950) is illustrative.

Only 9 per cent reported that they were kept very well informed on what was happening in the company, yet 66 per cent said they wanted such information and 64 per cent said that other employees also wanted it.

Only 10 per cent knew where they stood with their foremen, and 45 per cent said that *much* of the time they did *not* know. Yet 76 per cent wanted this information and 67 per cent said that others also wanted it.

Other studies show comparable numbers who lack information about significant aspects of their work situation. Problems of ambiguity in the work situation are widespread and constitute important sources of stress for a great many people in the American labor force.

* Data are presented for male wage and salary workers only.

Sources of Role Ambiguity

The major objective of this chapter is an increased understanding of the emotional and interpersonal consequences of ambiguity. That understanding will be enhanced by briefly considering some of the determinants of ambiguity. Three general conditions are significant: organizational complexity, rapid organizational change, and current managerial philosophies.

Complexity of Modern Organizations

Although the modern industrial organization is the creation of the minds of men, it has grown in size and complexity to the point that no single person can comprehend at a given moment more than a small bit of that which is to be known about it.

In very small operations a manager might well know all the employees personally, their peculiar strengths, habits, and limitations. He may understand the requirements of each task and function to be performed for organizational effectiveness. With effort and intelligence he may know fairly well "what's going on" in his organization, and other members can be equally well informed.

But in companies of even a few hundred members, such familiarity with the organization is virtually impossible. With increased size the structure of the organization becomes much more complex. The division of labor becomes more differentiated and specialized; more levels of supervision are introduced to maintain coordination and control; and more people become involved in organizational planning. In many industries advanced technology adds to the complexity; no single person can be adequately trained in all the relevant technical areas. The fact that size and complexity of organizations exceed the individual's span of comprehension probably accounts for much of the role ambiguity found today.

Rate of Organizational Change

If size and complexity even in the steady state pose major problems for comprehension, it is still more difficult to maintain an adequate understanding of the organization during periods of change. Yet rapid change is perhaps the dominant characteristic of our culture.

Changes of three kinds pervade American organizations and contribute to ambiguity. First, there is the fact of organizational growth. Many companies are increasing in size at a rapid rate, and an almost essential companion of growth is reorganization. Tendencies toward decentralization represent, in part, an effort to control the confusion produced by rapid growth and increased complexity.

Second, changes in technology require associated changes in the social structure of organizations. New techniques for performing work are introduced continually. They often impose rearrangements of and within work groups. New techniques virtually always require revisions in role expectations toward those employing them, revisions which often must be learned through a complicated process of testing and retesting. Certain technological innovations, for example, electronic data processing and operations research, are themselves intended to cope with problems of organizational complexity and ambiguity created by other new technologies.

Third, many organizations in American industry are characterized by frequent personnel changes. Not only is employee turnover a general problem, but frequent transfers and reassignments within organizations are common. The early weeks of a person's new assignment, during which he is learning his role, are fraught with ambiguity for him. Insofar as he performs the role differently from his predecessor and holds different expectations toward his associates, he also creates problems of ambiguity for them. Unfortunately for the solution of such problems, in some companies it is rare for a person and all his role senders to remain as an intact role set for more than a few weeks or months at a time. Changes in the personnel of nearly every set are sufficiently common to be the rule rather than the exception. Such changes constitute a major source of role ambiguity.

Because interdependence is such a dominant feature of organizations, the effects of change are difficult to contain. A change in any one part of the system creates changes in other parts as well. When changes are continually introduced in various parts of the organization, the total system may be in a state of constant flux.

Because organizations are open systems, changes in them may stem from changes in the environment. The problem of predictability of the environment is illustrated by the growing numbers of staff positions in large organizations charged with the responsibility of long-range forecasting, an uncertain art at best. Changes in markets, in sources of supply, and in financing must be met with appropriate intraorganizational changes. For many organizations internal interdependence, vulnerability to outside influence, and rapidly accelerating

environmental change make a combined assault on the stability which is the strength of organizational process. Substantial degrees of ambiguity in many parts of the organization are almost inevitably the outcome.

Managerial Philosophy and Ambiguity

Role ambiguity is often the unintended consequence of factors that are largely beyond the control of any organizational member. It may also result from practices and procedures that members develop and persist in quite intentionally. Ambiguity has been described as growing out of problems in generating adequate and dependable information about issues which concern people in organizations. In complex situations undergoing rapid change, such information is difficult to obtain. But even when a relatively clear perspective can be generated—when the required information has been developed—it is seldom dispersed to all those who feel a need for it. Most organizations have rather restricted channels of communication.

The restricted flow of information is in part unintended. An individual in a key organizational position is often insensitive to the extent to which others would like to share information he possesses. He may be unbelieving or merely unaware that sharing information with others would be helpful to them and perhaps to the whole organization. Through inertia, through lack of consideration, and through lack of awareness the organizational word often does not "get around." This is too often true, but it is only part of the truth. The blockage of communication is often overdetermined. The attitudes and working assumptions of executives and supervisors as well as rank and file contribute to failure of information spread in several ways.

In *The Caine Mutiny* Herman Wouk described one organization in terms which have been echoed by members of many: "The navy was designed by geniuses to be run by idiots." A more flattering statement of this theoretical position would assert that although the organization as a whole must be coordinated within the framework of a rational over-all design, each member need not understand that design. As long as each man performs his own role and abides by the regulations, the system will run itself. All that is required of individual members (save, perhaps, for top managers) is that they know the general rules and their own responsibilities. If they have the information required for performing their own jobs, the rest is none of their business. In deciding whether or not to pass on certain information, the question, according to this set of assumptions, is not whether the

other person would *like* to know, but whether he *needs* to know in order to get his job done. Logical requirements are acknowledged; psychological requirements are denied.

Generally, this is not an impossible set of assumptions. Many a system comes near to running itself on this basis. Members do muddle through without knowing "where they fit in the infinite scheme of things." At times of crucial decision every organization has its well-guarded secrets. Crucial decisions in hierarchical organizations are almost always made behind closed doors, supposedly to control the spread of rumors (which spread fastest when important doors are closed) and to increase the likelihood of successful implementation once the decision is made. There are many arguments for the restriction and control of information, including the time and effort required to keep everyone well informed. Consistent research findings that link completeness of communication to organizational effectiveness have yet to overcome them.

Let us consider just one other set of factors which limits free and open sharing of information in organizations. Control over the behavior of members is the essence of social organizations. Each member is charged with certain responsibilities and is subject to sanctions if he fails to carry them out properly. Each member is vulnerable. He must use sound judgment, make wise decisions, and act with skill and dispatch—or at least appear to. Therefore, each member is motivated to have at hand all the information relevant to his decisions and actions, including their evaluation by others. But he is less vulnerable if others do *not* also have that information. His decisions cannot be challenged if no one else has an adequate basis for judging them. Each person, therefore, has substantial reason for wanting to be better informed than anyone else on matters affecting his work. If one wants to control the behavior of others but be master of his own organizational fate, he is tempted to arrange for complete and undistorted information flowing to himself, but to filter and control the information flowing to others.

Such manipulation of information flow threatens the basis for sound decisions and cannot be used on a wide scale without dire consequences. In the extreme it is bound to be self-defeating. Although it has few public defenders, many people at all organizational levels practice it regularly and enthusiastically. As we shall see in Chapter 11, restriction of information is one of the few techniques available to subordinates for influencing superiors, and they so use it.

The Ambiguity Experience and Its Emotional Consequences

There are many factors producing ambiguity in organizations, many reasons why more than a third of the American labor force is disturbed by the lack of information required either for the performance of their jobs or for the attainment of their personal goals. Ambiguity, for many of them, is determined by several factors in combination and its costs paid in many places. Let us consider first the costs of ambiguity in the work role as they appear in the case of Nighter, a general foreman on the evening shift in an assembly plant. In addition to a rather difficult conflict stemming from the opposing demands of his supervisor and his counterpart on the day shift, Nighter is at times virtually overcome with ambiguity. Some sources of his ambiguity are identified in the following exchange:

Q: How long have you been General Foreman?

A: Well, I was a foreman for a year-and-a-half and then I was general foreman for a year-and-a-half, two years, I guess; then I was superintendent for about five years, and now I'm general foreman again for about two years.

Q: You came down to this plant as general foreman?

A: No. I was superintendent here when we first opened up, see? Then they wanted to shift everybody around because they were not satisfied with the way things were running, so . . .

Q: How do you feel about all this shifting up and down?

A: Well, there's a lot of confusion. You get used to the policies of one man and how he operates and before you know it he's gone and you get somebody else and there is all this shifting around. It finally gets to the point where production loses complete control of the area and it's all run from the front end up here and some of them don't even know what a block is. I'm serious about it. Maybe somebody thinks it's a good policy, I don't know, but nothing has been solved. The conditions that existed out there, I think they're worse today than they were before, when there was a stable supervisory force out there. I don't know. They seem to want to keep the supervisors in a turmoil all the time.

And turmoil pretty well characterizes his experience. He goes on, describing a combination of conflictful and ambiguous circumstances:

. . . Well, what was happening there was that you'd come in in the morning and you'd start going through your division out there. You probably would get in here about 6:30 and about a quarter to eight or

eight fifteen we'd have a meeting up front which would last about two hours. You'd go back to the department and start to go to another department and before you knew it you got another call because you had another meeting to go to some place. You might be three hours there and then you got another start and something else would take you away from the job—somebody from Planning would come in, or somebody from Budget—then at night about five o'clock we'd have another meeting until about 7:30 and they would want to know what the hell happened in the department. Why, hell, you haven't spent enough time out there to know exactly what the hell has taken place. You might be in the plant 12 hours a day, but you might be in the department about 2½ hours because of all the meetings they had around here. So when you couldn't spend any time going out and talking with your supervisors and getting your general foreman around to find out just what the problems were, well, you didn't know your job. So you can't go to meetings for six to eight hours a day and expect to know what the hell is going on out on the floor, and be able to run it.

Under such pressures Nighter's tension and anxiety finally gave way to resignation, with substantial loss of self-esteem:

Q: Are things worse in this plant than in any of the other plants?

A: Things are worse in this plant than in any other place I've ever known.

Q: How so?

A: Well, the constant shake-ups around here.

Q: Do they ever give you any explanation of why they do that?

A: Well, I didn't need an explanation for that. When they made a switch in personnel around here, well, the first thing they told me was that they would like me to give up—it was brought about in a roundabout way—to give up the superintendent's job. So I figured, well, hell I wasn't going to do it just because somebody was telling me to without my actually recognizing why. You know, they actually didn't have the power or anything. It finally got so bad that I figured it wasn't worth it—health and everything else—I was getting nervous. Normally I'm relaxed in the things I do. I try to think things out. I figured the job wasn't worth the money so I told them they could have the superintendent's job and if they wanted me as a general foreman around here I'd be glad to serve in that capacity and if I could help them—I knew that they were short on the afternoon shift—I told them I'd be glad to go on afternoons to help them out and I told them I would do whatever they wanted me to do.

Q: Did they ever explain what they thought it was that you were doing wrong?

A: No. They just said that I didn't know how to handle the job which I had handled for five years.

Apathy and feelings of futility accompany his resignation:

Q: It must be pretty damn hard on a guy though to get promoted and demoted—back and forth all the time? Is it kind of hard on you?

A: Well, it doesn't do you any good. I know I used to spend a lot of time on things like quality control, labor relations, and read books on how contracts should be written out, interpret contracts and stuff like that. Well, on top of that you'd be in and out of here and you were spending something like twelve hours a day in the plant. Coming in on Saturdays on your own time checking up and stuff like that. Well, they change things and they assume a lot of things, so we try it their way. It's been hard. Like I say while I was keeping myself primed on items like that, I don't any more. I'm being fair about it. I don't bother any more.

Q: How clear are you about what the people around you expect of you?

A: Well, as far as what they expect from me, there's never been an actual discussion of it. No one has ever actually told me what they expect of me. I go out and do the best that I can the best way I know how.

Q: But you don't always know what they . . .

A: I don't always know what they think of it.

Q: Is there any particular part of your job where you are not clear about what people expect?

A: Well, a guy likes to know where he stands in a group, what his future might hold for him, somebody to have a heart to heart talk to say what's wrong and not wait until the last minute and then keep harping about something that you have no control over. I say I like to know where I stand. I would like to have somebody tell me which way I'm headed and if I'm going about it the wrong way, I would like for them to tell me. I'd like to please somebody rather than displease and be kept in the dark. That's the way everybody is around here. Nobody knows where the hell they stand.

The pathos in Nighter's words reflects the strain of a person bound into a situation he can neither control nor understand. Much as he would like to "do right" by the organization, he does not know what doing right means. Moreover, he learns only indirectly that he has failed; his job is taken away without explanation, or at least without one that he can understand and accept. It is perhaps understandable that his feelings of helplessness and futility are expressed with a touch of bitterness.

Another supervisor in a manufacturing plant is even more bitter about the ambiguity in his role. Maintainer (a general foreman in the maintenance department) was transferred to the evening shift without warning or explanation. This is how he describes that episode:

A: They don't tell you when they move you. Are you doing a bum job, or a good job? They don't ask you; they don't tell you nothing. You are in the dark. Now, what did I do wrong, that is all you think of.

Well, if they came around and said, "I got a job here I want to put you on for a while. We're having a lot of trouble." Well, I will go in and dig in. They don't do that. They say, "You start over here." That's it.

Am I doing a good job? What's the matter with the other guy, why did they take him out? They don't tell you nothing. They don't ask any questions. They don't tell you what the hell is up.

The way that I was told about going on the second shift was a guy that I don't work for, a guy that I don't know at all, some stranger, he came over and says, "Hey, I hear you got to go on second shift." Well, Mr. X. just made out a chart and put me on second shift. I guess someone seen the chart and my name was on the chart.

Q: Who came down and told you officially that you were on second shift?

A: Well, the manager's assistant came over and says, "Hey, didn't anyone ever talk to you about the second shift?" I says, "Hell no, I hope I don't have to go on second shift." "Well," he says, "I guess you have to. They got you on the list, on that sheet up there." He showed me the sheet. So there I was.

Q: Well, do you think you will ever find out why all this happened?

A: I probably won't.

Q: Do you think if you went up to the front office they would tell you?

A: They would probably give me a silly answer. That's the way this damn place operates.

In frustration and bitterness, Maintainer's voice cracked several times during the above exchange. Although he is generally clear about his responsibilities and feels technically qualified to carry them out, he is understaffed and under a great deal of pressure. Moreover, he feels that his superiors do not appreciate the difficulty of maintaining a complex semiautomated assembly line.

Q: What parts of your work do you find most stressful?

A: Well, like I say, it is people giving orders and nobody knows what the hell they want you to do. Like when I was on days, when a machine would break down, there would be about fifteen white collars there and they all stand there popping questions. "How long before it will be done? How long will it take you?" You didn't know what the hell was the matter with the machine because you couldn't get near the goddamn thing.

And in another part of the interview:

- Q: How often are you bothered by feeling you won't be able to satisfy the conflicting demands of your superiors?
- A: Well, when you don't get no support from different people, well, sometimes you say, "What the hell is the use." I do the best I can and that's that.
- Q: I suppose that bothers you quite a bit?
- A: Yeh, it bothers you all the time. When you are trying to do a job, and you've been doing it right and doing a good job all along and somebody comes along and says you ain't doing a good job and won't give you an answer why or what for, then you begin to wonder. Nobody tells you. You go and ask and they shrug their shoulders. They give you a cold shoulder.

As disgruntled as Maintainer is, one wonders why he does not leave the organization. He feels that past pay increases and the pension plan have bound him into the system. A move would be too costly for him at this stage in his career. He also has a strong personal investment in the organization, which remains in spite of recent reverses:

- Q: What about your present plans? Are you thinking of making a change in jobs in the future?
- A: Oh, the way it is going now, anything is welcome.
- Q: Are you thinking about looking for another job?
- A: No, I got so much time in here, and I think that I've done my duty. As far as I'm concerned, I'm still trying to do my duty. I'm satisfied with working for the corporation and I've got a little investment of myself in here. I'd like to follow it through. I wouldn't like to switch jobs now.

Perseverance and stiff upper lip notwithstanding, Maintainer is suffering substantial strain. The ambiguity and apparent capriciousness of his work environment almost have him down:

- If you know the reason for it, it would be all right. If they would give you some actual facts, it wouldn't hurt a guy so much. If your supervisors would come over and talk with you, there is usually a solution no matter how big the problem or how small. But these guys don't even talk it over with you.
- Q: It seems that all you have been trying to do is find out what the story is?
- A: That's right. I don't think anyone should have to work in the dark. Would you like to? I just want a square deal. Why, if I can get a square deal and some decent answers, I'll be satisfied. But you don't get that here.
- Now, I'm not trying to get revenge or nothing like that. I just want

working conditions. I want something to be happy about. I come to that door and say, "Goddamn, I got to come into this damn place again." That is the way you feel. (His voice breaks.) No kidding. And I'm not the only one. This is throughout. Everyone feels the same.

Some Conclusions on the Nature of Role Ambiguity

These cases give some illustration of the variety of forms role ambiguity takes. Various aspects of the role and of the situation surrounding it may be ambiguous. The person may be uncertain about the scope of his responsibilities, about what is expected of him by others, about what behaviors will be effective in meeting these expectations. The organizational structure may be ambiguous; he may be unclear about who has a legitimate right to influence him or about the limits of his authority over others. Confusion may center around organizational rules and regulations, around conditions under which various sanctions might be applied, or around what the sanctions might be. Ambiguity about how one is evaluated by his associates, about how satisfied they are with his behavior, seems to be a common problem. There may be uncertainty about job security or opportunities for advancement.

Both Nighter and Maintainer suffer ambiguities in several different areas. Some of these are relevant to their personal satisfaction and to the gratification of personal needs (the socioemotional aspects of the role), while others are more relevant to task performance. Lack of structure in these two areas can be expected to have some similar consequences but some differential effects as well.

There are almost as many kinds of emotional reaction to ambiguity as there are foci of ambiguity. Tension, anxiety, and fear are common concomitants of uncertainty; anger and hostility also can be aroused. Nighter and Maintainer both expressed feelings of futility and apathy; they do not feel that they can do much about their situations and are no longer sufficiently motivated to try.

There is another point to be taken from these cases. Although ambiguity is stressful in its own right, the strain is even greater when the capriciousness of the environment has been demonstrated in past experience. Both Nighter and Maintainer are bitter about abrupt transfers, and for them ambiguity has taken on a new meaning as the prelude to unwanted change. When one has been burned in the past, he has additional reason to fear a fire behind the smoke of ambiguity. The world becomes not merely unknown, but hostile and dangerous.

The case material, although providing a dramatic portrayal of the problem of ambiguity, should be regarded as a source of hypotheses rather than a test of them. Quantitative statistical evidence for some of the conclusions drawn above is available from the intensive study. The analysis which follows is based on this evidence and deals with the consequences of the ambiguity experience. The procedures for measuring experienced ambiguity are presented in Appendix D. In neither of the current studies was a comprehensive effort made to measure the degree of objective role ambiguity.

Table 5-1 presents the correlations between three measures of experienced ambiguity and four measures of emotional reaction. Column 1, the general index of experienced ambiguity, indicates that the emotional consequences of role ambiguity are very much like those of role conflict. Ambiguity leads to increased emotional tension and to decreased satisfaction with one's job. It also contributes significantly to a sense of futility and to a loss of self-confidence. Conclusions about the personal costs of ambiguity are well supported statistically. Columns 2 and 3 represent the experience of ambiguity in the task and socioemotional areas, respectively. Correlations between emotional reactions of the focal person and lack of clarity on his part regarding

Table 5-1 Correlations between Measures of Experienced Ambiguity and Various Emotional Reactions (from the intensive study, $N = 53$)

<i>Emotional Reaction</i>	<i>Experienced Ambiguity Measures</i> ¹		
	<i>Ambiguity Index</i>	<i>Role Expectations</i>	<i>Evaluations</i>
(a) Tension	.51 **	.44 **	.40 **
(b) Job satisfaction	-.32 *	-.33 *	-.17
(c) Futility ²	.41 **	.34 *	.20
(d) Self-confidence ²	-.27 *	-.20	-.44 **

* $p < 0.05$; ** $p < 0.01$.

¹ Details of the construction of these measures are given in Appendix D.

² Futility and self-confidence are codes based on materials from the second focal interview. Both variables are intended to represent dimensions of a sense of effectiveness in dealing with one's environment. A person coded low in self-confidence is one who experiences a loss of effectiveness as a personal shortcoming. A person coded high in futility is one who regards his attempts at environmental mastery as being in vain either because of personal limitations or insurmountable environmental obstacles.

role expectations others hold for him are presented in column 2; column 3 presents comparable correlations with uncertainty about how he is evaluated by his associates. Tension is associated with ambiguity in both areas, but some interesting differences are found in other emotional responses.

Ambiguity about role expectations tends to lead to dissatisfaction with the job in general and to feelings of futility. If a worker does not know what he is expected to do in his job, he cannot act appropriately; his sense of effectiveness as an active agent is seriously curtailed. Paraphrasing Nighter's reaction (quoted above): "What's the use of going to a lot of extra work trying to keep up to date in various fields which might be relevant to the job; it won't get you anywhere if you don't know what they want of you." A feeling of effectiveness depends first of all on knowing what the job is, what it requires. On the other hand, ambiguity regarding role expectations is not so detrimental to self-confidence; the problem is in the environment, not in the self.

In contrast, uncertainty about how satisfied others are with one's behavior does not contribute significantly to job dissatisfaction or to feelings of futility. The intrinsic value of the job is not seriously challenged by ambiguity in evaluations, and the person is generally able to go on working. For the most part, his sense of effectiveness in the job is only moderately curtailed when others fail to provide adequate evaluative feedback. However, absence of information about how one is esteemed by his associates is a major source of tension and a serious detriment to self-confidence. Self-confidence is generally rooted in a process of reflected appraisals from others. When the "looking-glass self" is seen dimly, confidence is undermined almost as much as when it is seen negatively. Absence of evaluative feedback (or the presence of garbled feedback) may be almost as ego threatening as deprecating feedback.

Mediating Effects of Need for Cognition

Although the data just given have supported the general hypothesis that the greater the ambiguity an individual experiences the greater will be his experience of tension, the role of individual personality differences in this affective response must also be considered.

A number of theorists (Cohen, Stotland, and Wolfe, 1955; Katz and Sarnoff, 1954; Maslow, 1943; Murphy, 1947) have postulated a need—variously called need for cognition, need for structure, or in-

tolerance of ambiguity—which is a measurable characteristic of the organism and which may operate independently of other needs. Cohen, Stotland, and Wolfe define this need as follows:

Need for cognition can be defined as a need to structure relevant situations in meaningful, integrated ways. It is a need to understand and make reasonable the experiential world. "Meaningfulness" and "integration" are individually defined in that they vary with the person's past experience and capacity for such integration. For any given individual different situations will be differentially important for the arousal and satisfaction of the need. In addition any given situation will have differential importance for the arousal and satisfaction of the cognition need (1955, p. 291).

On the basis of this definition Cohen, Stotland, and Wolfe tested the hypothesis that the association between ambiguity and frustration would be more pronounced among individuals characterized by a high need for cognition than among those with a low need for cognition. The measure of the need for cognition in this laboratory study consisted of a group of forced-choice reactions to a wide variety of hypothetical situations. Here is an example of such a situation, with "b" as the alternative keyed for need for cognition:

Participation in a discussion group for solving a problem is most satisfying when:

- a. the problem is vital to you and to others in the group
- b. the problem is clear and the purpose of the group is evident
- c. the group is small and the discussion friendly

The data indicated that all of those individuals subjected to an ambiguous stimulus were more negatively affected than those who were given a structured stimulus, and that this negative reaction was the more pronounced for those scoring high on the need-for-cognition measure.

Our intensive study data permitted the testing of this same hypothesis. Table 5-1(a) has already demonstrated a substantial association between experienced ambiguity and tension scores. Figure 5-1 adds an important qualification, dividing intensive study respondents into groups of high and low scorers on the Cohen, Stotland, and Wolfe measure of need for cognition. The figure indicates that the effects of experienced ambiguity on tension scores are considerably more pronounced for those scoring high in need for cognition. The emotional consequences of ambiguity cannot, therefore, be fully appreciated

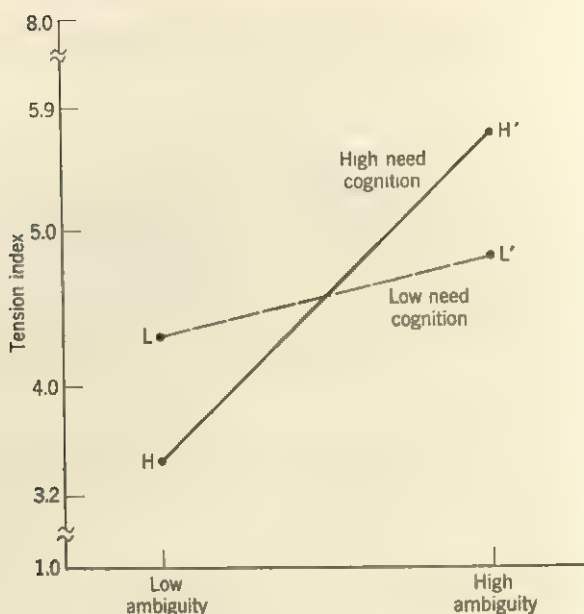


Figure 5-1. Tension in relation to experienced ambiguity and need for cognition (from the intensive study). Note: Many figures in the following chapters will be drawn in a form similar to this. Each presents the relationship between role conflict or ambiguity and some dependent variable at two levels of some third variable. The numbers of cases represented by the four points of these figures (H, H', L, L') will be indicated in footnotes. Footnotes will also indicate the levels of significance, based on *t*-tests, of relevant comparisons. The information given below is typical for figures of this kind, with point and marginal means reported parenthetically. *N*: H = 14; H' = 11; L = 12; L' = 12. *Comparison*—H (3.5) vs. H' (5.7): $p < 0.01$; L (4.3) vs. L' (4.8): n.s.; H vs. L: n.s.; H' vs. L': n.s.; H + H' (4.5) vs. L + L' (4.6): n.s.; H + L (3.9) vs. H' + L' (5.3): $p < 0.01$.

without a consideration of the motivational characteristics of the individual experiencing the ambiguity.

Relation Between Ambiguity and Conflict

Since the consequences of conflict and ambiguity are similar, the question of their relationship with each other arises. There are several reasons for expecting them to be associated. (1) The presence of conflicting role pressures may create uncertainty for the focal person. If various people press him to do different or even inconsistent things,

he may not know what to do. Although each expectation may be clear, in combination they may add up to confusion rather than clarity. (2) If the role is ambiguous for the focal person, it probably is so for many of his role senders as well. Conflicting pressures might be more likely under such circumstances, because the senders are unaware of the inconsistency in their demands. (3) Some of the conditions cited as sources of ambiguity—organizational size and complexity, rapid change, differential objectives of subparts of the organization—are also sources of conflict (see Part III). Role conflict and role ambiguity share to some degree the same spawning ground.

But only modest, generally insignificant correlations are found between measures of *objective* conflict and of experienced ambiguity. It appears that conflict and ambiguity are independent sources of stress; either or both of them may be present in any given role. Table 5-2 presents a fourfold comparison of the effects of conflict and ambiguity on tension. It is apparent that the presence of either one is tension producing, and in about the same degree. The highest level of tension occurs under the combined conditions of high conflict and high ambiguity, although the combination is not significantly more stressful than either one alone.

Interpersonal Consequences of Ambiguity

In Chapter 4 we noted that role conflicts are generally stressful, producing tension and dissatisfaction. Commonly this leads to such coping behaviors as rejection of or withdrawal from those role senders who are producing the stress, thereby weakening further such affective

Table 5-2 The Effects of Conflict and Ambiguity on Tension¹ (from the intensive study)

<i>Degree of Experienced Ambiguity</i>	<i>Degree of Role Conflict</i>		
	<i>High</i>	<i>Low</i>	<i>p</i>
<i>High</i>	5.3 (15)	5.0 (9)	n.s.
<i>Low</i>	4.9 (12)	3.4 (16)	<0.05
<i>p</i>	n.s.	<0.05	

¹ *p*-values based on *t*-tests between means. Figure in parentheses below each mean is the *N* upon which the mean is based.

interpersonal bonds as trust, respect, and liking. Ambiguity in various aspects of occupational role is similarly distressing—the emotional costs of role ambiguity are much like those of role conflict. The question now becomes: Are the techniques used for coping with ambiguity the same as those used for conflict, and are they equally detrimental to interpersonal relationships?

Evidence relevant to this question is found in Table 5-3. Three general implications are particularly worth noting. First, it is difficult to maintain close bonds with associates when confronted with an ambiguous environment. This is especially true for feelings of trust in others. Just as one loses confidence in self with increasing uncertainty (see Table 5-1*d*), he loses confidence in the cooperativeness and good intentions of others as well (Table 5-3*a*). Ambiguity has a somewhat less pronounced influence on respect and apparently none on liking for others in the work situation.

Second, not all areas of ambiguity are equally relevant to interpersonal relations. Ambiguity about role expectations held by others and directed toward the self is stressful and tends to undermine trust, but is not related to interpersonal attraction. However, uncertainty about the way one is evaluated by his associates—how satisfied they are with his behavior—is significantly related to trust, respect, and liking. The socioemotional flavor of ambiguity about interpersonal evaluations makes it a source of emotional strain and a deterrent to close, supportive social relations.

Third, a severe reduction in communication is more evident when the stress stems from conflicting role pressures than when it involves ambiguity; the correlations in Table 5-3*d* are modest compared to

Table 5-3 Correlations Between Measures of Experienced Ambiguity and Various Dimensions of Interpersonal Relations (from the intensive study, N = 53)

<i>Interpersonal Variable</i>	<i>Experienced Ambiguity Measures</i>		
	<i>Ambiguity Index</i>	<i>Role Expectations</i>	<i>Evaluations</i>
(a) Trust in senders	-.38 **	-.32 *	-.42 **
(b) Respect for senders	-.24	-.17	-.29 *
(c) Liking for senders	.02	.23	-.30 *
(d) Communication frequency	-.10	-.14	-.26

* $p < 0.05$; ** $p < 0.01$.

the strong findings on the effects of conflict on communication presented in Chapter 4. This difference is of considerable theoretical significance. Reduction in the frequency of communication is interpreted as a defensive withdrawal from a stressful situation. If the stress is created by role conflict—by attempts of others to change one's behavior—a withdrawal from those others may be an effective way of reducing the stress at least temporarily. Evasive tactics may help us temporarily to avoid the pains induced by others. Social withdrawal may not be desirable coping procedure from the organizational view, but it is nevertheless reinforced in conflict situations.

In ambiguous situations, which also produce emotional strain, there is no doubt a similar tendency to withdraw. In this case, however, withdrawal is self-defeating immediately as well as in the long run. Ambiguity is after all lack of information, and withdrawal reduces still further the opportunity to acquire information. A far more effective technique for coping with ambiguity would be to increase the frequency of communication with others in the situation, to engage them as information gatherers and providers. Many people in organizations use just this method. If they are unclear about what they can do at some time or about what others expect of them, they go and ask; they seek clarity by means of increased communications. Unfortunately, many others do just the reverse, and it is the rare person indeed who continues to seek out information from others if his early efforts have been discouraged. If ambiguity persists in spite of efforts at communication, most people reach a point at which they quit trying, and communication rates deteriorate. At this point the direction of causality may be reversed, with reduced communication generating still greater ambiguity.

Thus the modest correlations in Table 5-3d probably reflect opposing tendencies: the attempt to bring clarity out of ambiguity by means of increased communication, and the attempt to avoid tension by withdrawing from a stressful situation. The second of these responses seems to be more typical when the ambiguity centers around evaluations by others. Under this condition there is more evidence of withdrawal than of active seeking for information about how satisfied others are with one's behavior. This may be true because it is often both embarrassing and dangerous to inquire about how well one is doing—embarrassing because in our culture at least it is "unmanly" to appear too concerned about how well liked and esteemed one is, and dangerous because of the consequent loss in self-esteem upon learning that in fact others think very little of you. For some people it is easier to fear the worst than to know the worst about oneself.

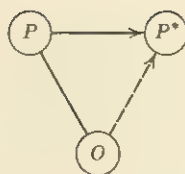
The question then becomes: Does ambiguity about others' satisfaction with oneself really imply some state of dissatisfaction on their part? Do those who withhold evaluative information in fact perceive the focal person negatively? There are good reasons for thinking that they might. Perceptions of one's associates are not easily communicated nor are such communications easily received, especially if they contain unfavorable elements. For reasons of etiquette, if nothing else, the more negative peoples' attitudes toward each other, the less evaluative feedback takes place.

Even if unfavorable evaluations are expressed, they may not be "heard." The experienced ambiguity may reflect a defensive distortion of signals which are clearly sent. Such distortions are prevalent partially because of their effectiveness in maintaining self-esteem. We have already seen that ambiguity constitutes a threat to self-esteem, undermining self-confidence (Table 5-1d). But direct reports from others about disliked aspects of the self are even more threatening. Thus a confusion of such messages—a retreat into uncertainty—may be an important defensive maneuver in the service of self-esteem.

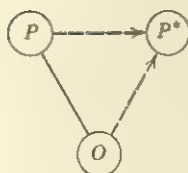
There is yet another reason for failing to receive negative evaluations from others. A common response to derogatory comments from others is a hostile counterattack. But aggression, no matter how well founded in righteous indignation, is so destructive to fruitful collaborative relations that it must often be suppressed in situations of continued interdependence. When people must work closely together, as is typical in industrial organizations, there is good reason to expect derogatory feedback to be suppressed both at the source (by those holding the unfavorable evaluations) and at the point of reception (by those who would be offended by them).

The problem becomes clear when the situation is expressed in terms of the theory of cognitive balance (Cartwright and Harary, 1956). Figure 5-2 represents a person, *P*, another person, *O*, and *P*'s self-image, *P**. At the outset, we assume *P* would like to see himself in a favorable light, indicated by the solid line from *P* to *P**. Given that *P* and *O* must maintain a positive work relationship (the *P-O* line), if *O* does not share this favorable view (dotted line from *O* to *P**), the situation is potentially unbalanced. The balance can be restored in any of three ways: (1) the *P-P** connection can be changed to negative (*P* loses self-esteem) or eliminated (as in isolation or projection defenses); (2) the *P-O* bond can be changed to negative (*P* becomes hostile toward *O*) or eliminated (*P* avoids working with *O*);

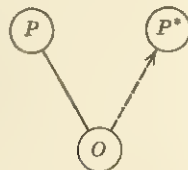
Initial Situation,
time 1



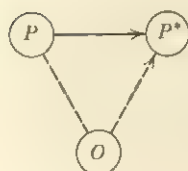
Solution 1,
time 2



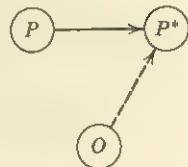
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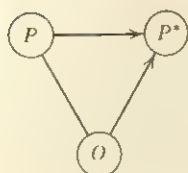
Solution 2,
time 2



or



Solution 3,
time 2



or

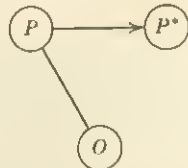


Figure 5-2. The receipt of negative evaluation as a problem in cognitive balance.

and (3) the $O-P^*$ line can be changed to positive (O appears to like, respect, approve of P^*) or eliminated (O 's evaluation of P^* becomes ambiguous).

The first balancing mechanism—changing attitudes toward the self in a negative way—is very costly to P , too costly to use other than as a last resort, and may be pathological in the extreme. The second—deterioration of $P-O$ relations—is probably quite common but costly for collaboration. Few organizations can long tolerate overt hostility between persons who are highly interdependent. The third alternative—distortion of O 's evaluation of P^* —is perhaps the most economical for all the participants. From the viewpoint of the total system, it may

even be functional in maintaining necessary working relations for *O* to withhold unfavorable comment toward *P*, and for *P* to fail to read negative connotations into any comments *O* does make. In some organizations efforts are being directed toward finding constructive ways of giving and receiving critical feedback. The work of the National Training Laboratories provides the outstanding example.

This discussion suggests that unfavorable and often uncommunicated evaluations by associates are experienced by the focal person as ambiguity about how he is evaluated. There is indeed quantitative evidence in support of this conclusion. Role senders' perceptions of the focal person are summarized in five Public Image factor scores, based on their ratings of him on a series of 22 trait-descriptive adjectives. (The procedure for this analysis is included in Appendixes G and H.) Four of the five Public Image factors are significantly correlated with ambiguity about others' evaluations. The more the associates of the focal person see him as emotionally unstable, as lacking assertive self-confidence, as being unbusinesslike or unsociable, the more uncertain he is about how satisfied they are with him.

Summary

Like role conflict, then, role ambiguity emerges as a prevalent condition in organizational life. Among its probable sources are the growing complexity of organizations, the rapid pace of technological change in our society, and the pervasiveness of certain managerial practices that deliberately foster ambiguity.

In an absolute sense role ambiguity exists when the information available to a person is less than is required for adequate performance of his role. Two types of ambiguity may be distinguished in terms of the focus of the individual's feelings of uncertainty. The first results from lack of information concerning the proper definition of the job, its goals and the permissible means for implementing them. This type of ambiguity concerns the *tasks* the individual is expected to perform, in contrast to a second set of concerns relating to the *socio-emotional* aspects of his role performance. This second kind of ambiguity manifests itself in a person's concern about his standing in the eyes of others and about the consequences of his actions for the attainment of his personal goals.

Both kinds of ambiguity are associated with increased tension and reduced trust in associates. But whereas task ambiguity tends to create dissatisfaction with the job and feelings of futility, ambiguity about

one's evaluation by others appears to undermine both the individual's relations with them and his self-confidence.

On the whole the effects of ambiguity resemble those of role conflict. These two conditions nevertheless occur independently of each other. Thus it is largely by chance that a person may find himself in a work environment that is both ambiguous and conflictful. When this occurs, however, he tends to suffer strains not significantly more severe than those evoked by either conflict or ambiguity alone.



PART THREE

Organizational Processes in Role Stress

So far the emergence of role conflict and ambiguity has been studied only within the microcosm that constitutes each individual's organizational environment. Now we are ready to turn to the way in which the larger organization affects the events in each microcosm. Local instances of conflict or ambiguity often reflect the failure to solve problems inherent in the functioning of any large-scale organization. Each of the four variables to be explored in Chapters 6-9 may be taken to represent such a general problem of organization.

The first of these problems is *coordination*. Functional specialization has been the classical solution to managing complex, large-scale production processes. One of the unintended effects of such specialization is that organizations become differentiated into a number of subsystems, multiplying problems of liaison and coordination. From a social-psychological point of view the significance of this development lies in the fact that each of these subsystems tends to take on

unique characteristics. This creates special problems for the individual who is required, whether by assignment or force of circumstance, to interact across the boundaries that separate these subsystems from each other and from agencies outside the organization. Chapter 6 treats of the conflict and ambiguity inherent in such boundary positions.

A second general problem is the demand for *innovation*. Every organization depends for its survival upon transactions with individuals and agencies in its environment. And for every organization that environment is in a state of change, although the rate of change may be slow or rapid. Each such change in the environment creates a demand on the organization to change appropriately in response. The problem of innovation looms large in organizations because of the magnitude and rapidity of technological changes in the organizational environment. Even when a particular enterprise does not experience the demand for innovation as a direct consequence of such environmental changes, their rapid spread in the society at large often creates new social conditions to which the organization must adapt. Established ways of doing business, however, are not given up lightly. Changing conditions in the environment introduce problems of conflict and ambiguity at many levels of the organization. Jobs that require innovative solutions to nonroutine problems are singled out for study in Chapter 7.

The problem of *authority* is ancient. Authority relations are the traditional means of organizations for making and implementing decisions. For the individual, a position of authority implies both responsibility and status. That positions of authority also impose special stress is widely believed and occasionally documented. Why this should be so is the central question in Chapter 8, where the relations of role conflict to organizational rank and occupational status are explored.

In order to function at all, a social system requires some degree of normative consensus, some *integration* of members around basic values and beliefs. Although a broad normative consensus underlies the operations of most industrial organizations, people at different echelons or in different jobs are apt to differ with respect to their interpretation of the organizational norms. Chapter 9 addresses itself to the differential interpretations of such norms and to the implications of those differences for role conflict. The normative climate in a particular work setting is a major determinant of its potential for conflict.

6

System Boundaries

MOST ANALYSES of organizational conflict tend to reduce it to the level of intergroup or interpersonal conflict, and understandably so. The conflicts between line and staff, union and management, production and inspection, credit and sales are prominent in organizational experience and classic in organizational literature. The list, however, tends not only to be familiar; it tends also to be miscellaneous and without any logical terminus. Subsuming these and other conflicts, Katz (1961) distinguishes fundamental types of built-in organizational conflict:

Functional conflict induced by various subsystems within the organization. Every subsystem of an organization with its own distinctive functions develops its own norms and values and is characterized by its own dynamics. For example, people in the maintenance subsystem have the problem of maintaining the role structure and preserving the character of the organization through the testing and assignment of new employees, by indoctrinating and training them, and by devising means for insuring satisfactory role performance. These people face *inward* to the organization and usually are committed to maintaining the existing organizational equilibrium. People engaged in such production-supportive activities as procurement and sales, on the other hand, face *outward* upon the world; they develop a different psychological orientation. So do people concerned primarily with problems of organizational adaptation, as, for example, research engineers and market research staff. These differing orientations are one built-in source of conflict. That is, the subsystems of maintenance, production, and adaptation develop their own norms and frames of reference, and in so doing create the elements of potential conflict.

Struggle between functional units in direct competition with one another. Large organizations often contain two or more units which are substantially the same in facilities and function. This arrangement may reflect the economy of some optimal size or the belief of management that internal competition is organizationally desirable. The numerous automotive divisions of the major manufacturers illustrate this phenomenon on a grand scale. Whether units of the same organization with similar functions engage in hostile rivalry or a kind of good-natured intramural competition depends more on managerial policy than on structure. The potentiality for conflict, however, is always present among such units.

Hierarchical conflict over organizational rewards. Almost inevitably, individuals occupying different parts of the organizational space are differentially rewarded. These differential returns are not solely monetary. They also include status, prestige, power, and the psychological satisfactions accruing from interesting and even challenging work. Especially if the hierarchy is rigid and elaborate, with accompanying compartmentalization by status and salary, there will be vested interest in the defense and enhancement of each group's position.

All three of these types of intraorganizational conflict affect organization members both generally and selectively. They commonly decrease the efficiency of the organization and, further, may create a situation of pervasive interpersonal mistrust and hostility. In addition, intergroup conflicts are often epitomized and recreated as conflicts within certain roles.

Looking at conflict between organizations, we can discern types which are closely analogous to the three forms of intraorganizational conflict described above. For example, the business organization is a system with its own special goals and dynamics. In the achievement of those goals it encounters other systems differently oriented. Some of these strive to modify or control the business organization. The unions, the courts, and the governmental agencies of regulation fall in this category, and their relationships with business are often conflictful. Such conflicts repeat, often more profoundly, the disagreements among functionally different subunits of a single organization.

Similarly, the kind of competitive conflict that occurs among functionally similar subunits of an organization is manifest in more intense form between different organizations which perform the same function and compete to determine who shall gain the greater acceptance. This, of course, is the dominant model of the free market. Its advantages have been often described and need not be reiterated. The relevant point here is that the model is characterized by built-in poten-

tiality for conflict. Indeed, the elimination of such conflict is defined either as monopoly or conspiracy in restraint of trade, and the organization that reduces the conflict of competition by so behaving merely exchanges one form of conflict (competition) for another (legal prosecution).

The conflict of hierarchical levels, common and obvious within organizations, is perhaps less obvious at the interorganizational level, although clashes between interest groups are frequent. Finally, there is a form of conflict which becomes sharply emergent as we look at the relationships between organizations. This occurs when two or more organizations are performing some joint or complementary function requiring continuing transactions in which there is a demonstrable opposition of interest, at least in short-run terms. Thus the manufacturing organization performs functions complementary to those of its suppliers and to those of the jobber to which it sells. Nevertheless the manufacturer seeks to obtain his supplies as cheaply as possible and to dispose of his finished products at the highest prices he can command, while his suppliers and jobbers are interested in getting higher prices for supplies and obtaining the finished product at lower cost. The results of such differences in interest are often conflictful.

Like intraorganizational conflict, conflict between organizations affects members of the conflicting organizations unequally and is often experienced as intra-role conflict. Essential to understanding the selective effects of conflict both within and between organizations is the concept of *boundary position*. A boundary position is one for which some members of the role set are located in a different system—either another unit within the same organization or another organization entirely. It is a rare person who does not have at least occasional job-related contact with people outside his work unit, but positions vary considerably with respect to "boundary relevance." Two dimensions can be distinguished: the amount of time a person spends in business contacts with people outside his work unit, and the importance of such contacts to the person's effective performance on the job.

Boundary positions (i.e., positions rated high on the above dimensions) are critical to the study of role conflict because they constitute a major battleground of intergroup conflicts. The occupant of a boundary position between two conflicting groups finds that the incompatible expectations of role senders are focused on him, and to the general effects of intergroup conflict are added the stresses of conflict within the role. To understand the stresses on a particular role it is important but not sufficient to know what intergroup conflicts are

prevalent in the organization; it is essential also to know the distribution of the role senders with respect to the conflicting groups.

The present chapter investigates the characteristics and consequences of two classes of boundary positions: positions involving contacts with persons outside the company, and positions involving contacts with persons inside the company but outside the department of the focal person. Evidence as to the stressfulness of both these boundary positions will be drawn from the intensive field study and the national survey, and will be elaborated by case materials indicating the types of conflicts most characteristic of different boundary positions.

Organizational Boundary Contacts

For each focal person in the intensive study, the importance of work-required contacts beyond the boundary of the company was obtained from the person's Master Activity List (see Appendix M) which included all the activities and responsibilities of the focal position as reported by the focal person and his role senders. From this list three coders rated the extent to which adequate role performance depended on the behavior of people outside the company with whom the focal person was required to interact. (The average correlation among the three ratings was .89.) In the national survey, the focus was upon the frequency with which each person interacted in a business capacity with people outside his company.

No attempt was made to measure the intensity of these border conflicts, nor whether an episode of acute conflict was in progress. Rather, we assumed that conflicts at organizational boundaries were more or less chronic. Acute intergroup conflicts were seen as the occasional transformation of chronic conflicts into critical conflict episodes.

Support for the view that an organizational boundary role is exposed to chronic conflict may be found in Table 6-1. Experienced role conflict, the dependent variable in this table, is measured by the respondent's estimate of the frequency with which his job places him "in the middle" between two groups of people. The experience of feeling in the middle increases monotonically with the amount of time the person spends in business relations with persons beyond the boundary of his company. Moreover, data from the intensive study corroborate the validity of these reports of conflict; 68 per cent of the focal persons in company boundary positions are above the median on the index of objective role conflict; the corresponding figure for positions away from the boundary is only 32 per cent.

Table 6-1 Experienced Role Conflict in Relation to Frequency of Contact with Role Senders Beyond Company Boundaries (from the national survey)

<i>Frequency of Contact Beyond Company Boundary</i>	<i>Mean Experienced Role Conflict¹</i>	<i>N</i>
Never	1.6	(157)
Rarely	2.2	(42)
Sometimes	2.4	(51)
Rather often	2.4	(40)
Nearly all the time	2.6	(55)

¹ The *F*-test of over-all differences among means is significant at $p < 0.001$.

What are the groups which convey to the person on the company boundary the sense of being caught in the middle? In Chapter 4, the matrix of role conflict (Table 4-1) indicated that among male wage and salaried workers persons who find themselves between two groups are most likely to report that these conflicting groups are management and union. Table 6-2 presents a comparable matrix of role conflict for those persons who interact with people outside their company "rather often" or "nearly all the time." These boundary residents are most likely to find themselves caught between management and people outside the company, with management-union conflicts taking on a secondary importance. In short, the combined data in Tables 6-1 and 6-2 indicate that as a person's job-required contacts outside his company increase, there is a corresponding increase in the extent to which he feels caught between the demands of the outsiders with whom he must deal and the requirements of his own management whose interests he must represent and protect.

On the basis of these tables, one might expect that as a person's frequency of contacts at the company boundary increases, he would feel greater job-related tension as well. Increased conflict would thus become the intervening variable between boundary contacts and tension. Table 6-3 indicates, however, that such a conclusion must be qualified, since the association between company boundary contacts and job-related tension does not appear to be monotonic. The least tension is reported by people who are never required to cross the company boundary; for people who must do so, however, tension scores are

Table 6-2 Matrix of Inter-Sender Role Conflict for Workers who Hold Company Boundary Positions¹ (from the national survey, weighted)

<i>First Party to Conflict</i>	<i>Second Party to Conflict</i>						
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
(a) Management or company in general	2%	—	9%	5%	13%	32%	—
(b) Person's direct supervisor(s)	—	4	8	10	2	8	1
(c) Co-workers within the organization	(9)	(8)	—	—	—	—	—
(d) Person's subordinates	(5)	(10)	—	—	—	2	—
(e) Union or its representatives	(13)	(2)	—	—	—	—	—
(f) Extraorganizational associates	(32)	(8)	—	(2)	—	—	—
(g) Other (family, friends, etc.)	—	(1)	—	—	—	—	2
Totals (%)	61	33	17	17	15	42	3

¹ The column and line headings indicate persons or groups whom the respondents identify as contributing to inter-sender conflicts. The table is set up in a form identical to that of Table 4-1. Total $N = 106$; "no conflict" and "not ascertained" cases are omitted.

Table 6-3 Tension in Relation to Frequency of Contact with Role Senders Beyond Company Boundaries (from the national survey)

<i>Frequency of Contact Beyond Company Boundary</i>	<i>Mean Tension¹</i>	<i>N</i>
Never	1.4	(173)
Rarely	2.0	(43)
Sometimes	1.8	(52)
Rather often	1.8	(47)
Nearly all the time	1.8	(64)

¹ The F -test of over-all differences among means is significant at $p < 0.001$.

about the same regardless of the required frequency of contact across the boundary. In addition, data from the intensive study indicate that there is significantly higher tension among people in positions for which boundary contacts are important ($p < 0.01$) than among those not in company boundary positions.

That people with constant dealings outside their own company are under high objective conflict but something less than maximum tension suggests that they may be well chosen or well equipped to handle the boundary conflicts they face. They are, for example, significantly ($p < 0.05$) more oriented toward the achievement of status than others (Chapter 17) and they may be reconciled to paying a price for the realization of these status aspirations. The more vulnerable or less ambitious may be taking the salty advice of a recent president: "If you can't stand the heat, stay out of the kitchen."

There are other possibilities, however, which are suggested by the case materials of persons who work at the company boundary. First of these is the improved coping technique which comes from previous experiences with similar conflicts. There develops an accumulated sensitivity to when it is most judicious to bend to the wishes of outsiders and when it is best to stick to company policy. Second, people in boundary jobs are likely to fall into one of a number of occupational groups which facilitate identifications independent of both company and outside role senders. The most prevalent of high boundary positions, sales and procurement, make available to occupants the opportunity to share their experiences with many others in generically similar positions and to profit from their similar experiences. These professional and quasi-professional identifications may provide the person at the boundary with referent group support in the conflicts he faces, with techniques for resolving such conflicts, or simply with reassurance that his difficulties are not so much the result of his own shortcomings as the common lot of those who occupy boundary positions. A person whose contacts outside the company are less extensive or are shaped by the special requirements of his particular job is less likely to find others in comparable positions who can offer experience and support.

A third reason for the stability of tension scores among persons who cross company boundaries at all has to do with organizational acknowledgments of boundary difficulties. Such adjustments are most likely when the situation is frequently encountered. An organization is likely to formulate a policy on how to resolve conflicts with some outside agency only when such conflicts are extensive and serious. If a person has only occasional contacts with outsiders, he is likely to have to in-

interpret company policy himself. The decision as to whose interests to compromise in a given situation will be his own, and the responsibility of a wrong decision may also be his. On the other hand, a company that includes many individuals with extensive outside contacts is more likely to develop precedents and formulate policies for resolving external conflicts. Under such circumstances a person faced with a conflict between the requirements of his company and those of outsiders may have recourse to organizational imperatives. Analogously, army policy recognizes the inevitability of conflicting orders, and provides priorities for the soldier to apply in resolving them.

Another kind of organizational acknowledgment of the stressfulness of boundary positions involves psychological support and rewards. For example, some companies send their union negotiators off to do battle with ceremony and later bind up their honorable wounds much as small villages may once have dispatched and welcomed home their Indian fighters.

These interpretations of the data relating boundary contacts to role conflict and to tension are tentative, of course. Additional evidence for them, although indirect, is available from the intensive study of 53 focal persons and the people who comprise their role sets. The possibility that persons in boundary positions are more likely than others to reduce the intensity of their relationships with role senders within their organization and seek other identifications is given some substantiation by their more marked tendency under high conflict to attribute very low power to their role senders ($p < 0.02$) and to decrease their confidence in the organization ($p < 0.001$).

Resources and Demands

Although the preceding data testify to the stressful character of organizational boundary positions, they do not indicate the particular forms these stresses assume. The most vivid testimony is provided by the people who experience the stresses *in vivo*. The case materials here suggest a number of generalizations concerning typical difficulties. One of these has to do with individual lack of control over demands and resources originating outside the company.

In order to maintain efficient role performance, a person must achieve and maintain a balance between the demands made on him and the resources made available to him to meet those demands. The often-heard complaint of imbalance between authority and responsibility is an example of this more general principle. When all the people who

either supply resources to the focal person or make demands on him are in his company, he can invoke shared organizational norms to secure more adequate resources or to temper the demands of role senders. When he deals with people outside his company, however, his bases of power over his role senders are likely to be reduced. No longer can he appeal to a common "company good" in seeking the mitigation of their demands, nor in many cases does he significantly possess the power of reward or punishment. As a result, he may be quite unable to induce his role senders to provide adequate resources. The achievement of balance eludes him.

For example, Oil Mover, in charge of the logistics of sending oil by tanker to major users, describes the following demand crisis he must handle:

The customer is out of heavy fuel oil. The president of this company wired our company yesterday asking us what we are going to do about it and how we are going to help them out. It falls on *my* lap to take action through risking a run-out in some *other* location in order to free a tanker for this individual. In today's particular situation, with this bad weather, we aren't sure just which point to shoot because we don't know what we can borrow from another company if we have to.

If such crises were exclusively attributable to the weather, they might be forever beyond the control of either the focal person or his role senders outside the company. But an additional factor contributes to these sudden demands on Oil Mover's resources by people beyond the boundary of the company—demands which might be less capricious were both Oil Mover and his role set oriented toward a common set of goals:

And then, you see, in addition to the weather—our wholesale customers buy for price reasons many times. Often when the market price is imminent, or these fellows think it's imminent, they raise or lower their demands on us and say that if you can't supply the oil when I want it, I'll buy from someone else. So we don't want to call their bluff, so we have the pressure to perform.

Even more disruptive than such unpredictable and arbitrary demands of customers is the failure of other outside role senders to perform adequately in areas of vital concern to Oil Mover. Unable to control adequately the refineries' supplies of oil which he in turn ships to his customers, Oil Mover must nonetheless bear the brunt of the failure of these refineries to supply him adequately:

The manufacturers tell me that they'll make so many barrels a day or so many in the month of April. If they don't make it, they may have a good reason for not doing it, but that doesn't mean that we don't have to keep the oil going to our customers.

A refinery from whom we are receiving supplies will commence to load a tanker. If they miss their schedule or have an upset piece of equipment in the plant, they just say "I'm sorry; we can't meet the schedule. Period." Now I'm sure that in the area in which we work it seems that when people can't perform, they just say "I can't perform" and then stop worrying about it.

Ultimately, of course, the axe of Oil Mover's company falls on suppliers who fail to perform up to standard. In the meantime he must somehow get the appropriate supplies of oil moved to customers. His feelings of blamelessness may be legitimate enough, but self-righteousness cannot move oil. In such crises, failure by Oil Mover's unit to obtain and deliver oil will reflect adversely on him and result in increased pressures from role senders in his own company. They may not find it easy to determine whether failure to move oil is really his *fault*, but they do know that moving oil is his *responsibility*. He may place the blame for failure on suppliers outside the company, but this is an excuse which quickly wears thin.

A similar fault-responsibility dilemma is discovered in the case of Forms Controller. He too is plagued by the performance failure of people on whom he must depend but who are situated beyond the limits of his company and of his influence. Forms Controller is responsible for supplying the rest of his company with forms printed by outside contractors. Not infrequently, these contractors are deficient either in promptness or in the quality of their work:

Q: What are some of the conditions, or particular situations that you have to deal with, that are particularly stressful, lasting for a period of time?

A: Well, I would say—it's hard to try to find one example because there are so many—but a common one is if we're doing a big form order and it begins to fall apart. That is, things go wrong on it—the printers can't make delivery, the design doesn't work the way we planned it to work. It won't feed through the machines when we start to use it. Any one of these things could cause us a great deal of problems because the actual value of the items we're talking about is the smallest part of it.

I could give you a pretty specific example. We have a credit card, which you are probably familiar with. Those customer credit cards are prepared on IBM machines. It's important, therefore, that those credit cards, since it's an introduction that the company makes to a customer, be an exceptionally good printing job but also that it can

be processed readily because millions of these must be sent out each year.

Now a job like that can give you a great deal of stress. For example, we bid this job out and a printer bid for it who we had little experience with and who told us that he could live up to specifications we had written on the job. When the job came in, unfortunately he wasn't able to hold the specifications for the job—the card wouldn't feed through the IBM machine. Now the actual cost of the particular cards—although it was high—was *nothing* compared to the clerical time that was wasted in feeding these things practically one at a time to get them through. We were not in a position where we could re-buy this job—not because we couldn't have the printer re-do it, or because we couldn't have gone to another printer and re-bought it and just threw the money down the drain, or got a rebate from this firm, but because of the fact that these cards had to be in people's hands by a certain time or we'd be out of business. So we had to make do with what we had.

Now you're under a terrific amount of strain in a situation like that because everyone is screaming at you and it really isn't your fault, but you can't refuse to take the blame in this thing to some degree, because it's in the company's interest that you get the cards and get them out.

Forms Controller explicitly recognizes that, although such failures are not his fault, they are nonetheless his responsibility, and he knows that others in his company are likely to recognize this also. He succinctly summarizes the limitation on pleading guiltless when people outside his company fail to perform adequately:

Now, you *can* just throw up your hands and say "It's all the printer's fault." But, you know, you can only do that once.

Stability and Disruptions

Not only are the failures of outside role senders particularly stressful to a person at his company's boundary; the performance inadequacies of people in his own company often prove unusually difficult for him. Lacking formal authority over his outside contacts, a person at the company boundary must rely heavily on personal sources of power over these role senders; the trust, respect, and friendship of his outside contacts is less a reward than a necessity. Credit Expediter, for example, relies heavily on informal interpersonal relationships in negotiations with his company's customers. But according to Credit Expediter, such negotiations are carried on within the framework of an ambiguous credit policy:

This company works with *no* credit policy as far as I'm concerned—or not understanding the policy. In some large companies where there are so many interlocking units, there is no one division or person that is willing to say this is what you do and this is what you don't do. You're in a constant confusion as to whether you're right or wrong, or whether this is actually what top management wants.

How does operating within such a policy affect Credit Expediter's negotiations with customers?

I am at a disadvantage as to how I handle or talk to an individual customer with money involved—of whether I am right or wrong or whether certain people in the company want me to do this or that.

You feel that when you have to talk to somebody, you're not really sure of how much you can say. It might turn out that you're hedging sometimes. And you might be concerned that the person you're talking to wonders "What kind of company do you represent?" when you can't come out and tell him. Is he wasting his time talking to me?

These customers expect a hell of a lot from somebody they do business with. Their attitude is "You're big, you have lots of money, you have an obligation. We've been customers of yours for a long time. You have an obligation to us."

Q: So is the trust in your relationship at stake here?

A: It's putting myself in this customer's shoes next week or the week after when we sit down to talk to him. I would wonder if I were he, "Well, what the hell is the matter with these people? Do they know what they want? Do they know what they're doing?" And I'd lose confidence in the individual who's doing it.

The relations of a person with people outside his company are subject to other, cruder forms of destruction by the aberrations of role senders in the company. Travel Specialist, for example, is responsible for making travel arrangements for individuals in his company. In securing passports and visas for these travelers, he must work intimately with foreign consulates. He emphasizes the importance of being on friendly terms with the consular staff; he is convinced that only through these friendly relations is he able to cut through much of the usual red tape in securing appropriate papers. But impatient people in his own company who deal directly, and undiplomatically, with the consulates, jeopardize Travel Specialist's relations with consular agents:

But when there *is* a problem with the foreign government and there is nothing that can be done—then, of course, you have to be diplomatic, because you get some of these people in the company who want to call

the consulate. And this the consulate doesn't like. I won't say we forbid this, but we discourage it. You can't have some high-pressure executive who is 100% on a particular problem blow up and tell off some clerk at the consulate. Oh yes, he *will* tell off some clerk at the consulate. Then the next time you go up—say, the next morning—for one of the other executives who wants to travel to that particular area, you get a shut door. So you've got to keep this from happening. Oh, it *has* happened, and it has taken two or three years to get things working to the point where you can walk in to the consulate and say "good morning."

We saw earlier that role senders inside the company have difficulty distinguishing between the failures of a person at the boundary and those of his outside role senders. The obverse of this problem is illustrated in the two cases just described. In both these cases, role senders *outside* the company have difficulty in distinguishing between the personal faults of the man in the boundary position and faults which have other sources in the company—an ambiguous credit policy or a hot-tempered executive. Whatever the immediate cause of the company's failings, the delicate relations of the boundary person with his outside contacts are jeopardized. Yet his preoccupation with outsiders sometimes invites disruption from within. Travel Specialist tends to bend over backward to maintain his hard won status quo with outside contacts in consular offices. Role senders within his own company voice frequent complaints about his tendency just to "keep coasting" and his resistance to suggestions from them about needed changes in the travel service.

Coordination Across Boundaries

In most of the boundary jobs reviewed above, a single person or department provided contact between the company and a set of outside business agencies. Additional problems arise for a focal person when he is not the exclusive boundary contact with a particular outside group, but represents only one of several company departments which act simultaneously and more or less independently in relation to the outside group.

Traffic Manager, for instance, heads one of two departments which simultaneously deal with people in transportation companies outside Traffic Manager's organization. He has the authority to assign to these shipping companies his own company's contracts for transporting its fuel. Simultaneously, the carriers of these same shipping companies are major customers for fuel supplied by Traffic Manager's company; in these matters the shipping companies deal not with Traffic Manager

but with his company's sales department. In this delicate relationship between Traffic Manager's company and the shipping companies which are at the same time its contractors and customers, he must guarantee that no shipping company will be so slighted as a carrier that it will begin to purchase fuel from a competitor of Traffic Manager's company. If he eliminates a shipper for inefficiency, the shipper may then cease to be a customer. Traffic Manager describes his problem:

Most of the carriers we use are customers of ours. They are large purchasers of fuel products. Now, we work very closely with our sales agency to endeavor to utilize carriers in such a way that we will aid and abet their sales. Now in foreign transportation, due to the fact that all shipments go into customs and this sort of thing, these shipments are public records. These carriers know exactly every pound of freight that every competitor of theirs gets.

So, we *do* have pressure on us for the allocation of freight to support our sales, and it is a very delicate situation. . . . Now, you'll run into, for example, many carriers operating between here and Europe who have weekly service. They're all good operators so that their service is equal; they belong to a conference and their rates are constant. So how should we allocate our business between, say 8, 10, or 15 lines that are operating to Europe—of which maybe all are our sales customers, all of them are buying products from us—and keep them happy or keep them reasonably happy?

While keeping these carriers happy, Traffic Manager must also comply with the demands of the sales department of his own company. When asked whether he ever gets conflicting orders or instructions from different people around him, he replies:

Well, we get conflicting instructions from outside the department. For example—in our relationship with the sales department on this allocation to carriers. I mean, the salesmen—each one would be trying to support his line, his carrier customer. It's *his* people, see. . . . Christ, if the sales department has a contract with a carrier coming up this week they'll say why don't I help this carrier out; then next week they'll say how come somebody else's tonnage dropped off who is in direct competition with this carrier. You got so much tonnage and can only support so much. And if you're going to give it to this carrier, you got to take it away from someone else.

Quite understandably, when Traffic Manager is asked whether there are conditions or situations which are particularly stressful on his job, he replies, "Well, now—the relationship with the carriers. It's kind of a big jigsaw puzzle."

Some of the difficulties of Credit Expediter, who operates within an unclear and shifting company policy, have already been discussed. Like the coordination problems of Traffic Manager, Credit Expediter's problems are complicated by the necessity of his acting in coordination with another company department in relation to role senders outside the company. It is not uncommon, according to Credit Expediter, for the policies of the sales department and his own credit department to be at odds, the sales department trying to induce the customer to increase his order while the credit department is planning simultaneously to reduce the amount of credit extended this customer. To complicate the problem even further, Credit Expediter is frequently asked to assist the sales department in making a sale on Monday to a customer whose credit he plans to restrict on Tuesday. He says:

I spent all day yesterday on an account where the sales department couldn't get a particular lubrication order for a ship that I was asked to get because of my contact. Now it's a strain on me because this happens to be one of the accounts that we're in disagreement with the sales department about. And I've been asked to set up a date for next week to tell this customer that we've gone too far with his credit. Yet I'm asked to secure some additional business with him. And I'm really in the middle on something like that. . . . So here I'm trying to get a piece of business when next week we'll be telling him we can't go on with him.

It puts me as an individual in a hell of a spot. I have to be *so* careful of what I say in trying to get the business away from competition at a higher price, and then knowing that next week I'm going to tell him that we can't continue on this basis.

There is a very close fraternity in shipping circles, and this individual happens to be one of the top owners. So it is not going to take long that others are going to know our attitude toward him which reflects back to me. And it is going to make it difficult for me, even where I might have a close relationship. They're going to wonder every time I call or see them, or take them to lunch: "Well, is he going to tell me that my credit is now going to be restricted as he did to my friend?"

It worries me. I just can't forget something after it's done, and come back and do the next thing. It's on my mind. It was on my mind at three o'clock this morning. I woke up thinking about it, and I'm concerned about it. Is it right or wrong to be doing this?

There is the flavor of guilt in this question. Close personal ties with outsiders are vital for those on the company boundary. These ties, however, bind two ways, liking and respect from the outsiders often being coupled with similar feelings on the part of the boundary dweller. Yet these additional bonds and identifications with outside interests

transform Credit Expediter's feelings from routine annoyance with his company's policies into that self-reproach which murders sleep.

Departmental Boundary Contacts

The importance of boundary positions for the study of role conflict is not limited to those positions which link the organization of the focal person to outside groups. Parallel problems occur with respect to positions for which all role senders work in the same organization but within diverse departments. The boundaries between subsystems can be as stressful as the boundaries between systems. Several respondents with extensive interdepartmental contacts remind us of this fact in their own words:

In trying to satisfy as many areas of the company as we do in our daily work, and oftentimes having to play the role of Solomon, someone is not going to be fully satisfied.

I would say this job poses a lot of stress for its level—due in part to the relationships with which you work, because most of the people aren't your subordinates or peers. But within *your* departmental framework, you are working across departmental lines.

At the present time we are crossing departmental lines, from one department to another. Maybe the approach should be to have a separate group for this activity so that you get away from the concept that this is one department trying to enforce its decisions on the other with all of its vested interests.

There are areas where I bump up against other people being interested in the same things I'm interested in. I think it is by nature of the kind of work we are in here or where I'm interested in optimizing the company's costs as well as keeping our customers supplied that we cross departmental lines and poke into other people's affairs.

For Executive, fear of such "bumping" and "poking" delays his decisions in areas of dubious jurisdiction:

I find myself spending an awful lot of time trying to decide just who should do a certain job—whether it should be within our own department, or the controller's division, or the cost accounting division or the planning and design division. I think this is a great waste of time, and personally I think that it has been quite a personal kind of waste. I hate this kind of waste. Maybe I'm peculiar that way. I don't know. This bothers me quite a bit.

Although Executive's peculiar departmental problems are experienced as uncertainty, Nighter (Chapter 4) emphasizes the conflictual aspects of his boundary difficulties. The opposing demands of his own superior (for high production rates) and the day shift superintendent (for whom he must leave adequate supplies in the feeder lines) are all the more difficult to cope with because the two shifts exist as separate subsystems, each with its own objectives, potential rewards, and modes of operation. Nighter is left feeling, in his words, "like a rose between two thorns," not knowing whom he ought try to satisfy.

The allusions of these respondents regarding the stressfulness of departmental boundaries were translated into statistical terms in a manner similar to that described for organizational boundary positions. For each focal position in the intensive study, the importance of contacts across departmental lines was coded from the Master Activities List for that position (interjudge coding reliability = .66). As was the case with organizational boundary positions, people in these departmental boundary positions were found to have significantly higher tension scores than people in other jobs. Of the people in positions for which interdepartmental contacts are important, 74 per cent are high in tension (above the median); among people in positions for which interdepartmental contacts are less important, only 40 per cent are under high tension.

Data from the national survey are consistent with these findings. Each respondent reported the frequency of his contacts with members of his company outside his own department. As Table 6-4 shows, feelings of tension and of being "caught in the middle" (experienced role conflict) increase regularly with frequency of contact across departmental lines. This relationship is relieved under the peak condition in which a role demands cross-departmental contacts "nearly all the time." For such specialized roles, like those involving constant contacts across organizational boundaries, we assume that selection, trial and error, and the adaptation of organizational machinery combine to prevent a situation which would otherwise be both chronic and unbearable—a kind of contradiction in organizational terms.

Problems of Power and Misunderstanding

Two basic problems of people in departmental boundary positions are analogous to those faced by their counterparts at the company boundary: a reduced repertoire of techniques effective for influencing role senders outside their own department, and a sizable number of role senders who do not understand the demands of the boundary job.

Table 6-4 Frequency of Contact Across Departmental Boundaries in Relation to Tension and Experienced Role Conflict (from the national survey)

<i>Frequency of Interdepartmental Contacts</i>	<i>Mean Tension¹</i>	<i>N</i>	<i>Mean Experienced Role Conflict¹</i>	<i>N</i>
Never	1.4	(116)	1.7	(101)
Rarely	1.6	(88)	1.9	(83)
Sometimes	1.8	(88)	2.2	(80)
Rather often	1.9	(52)	2.5	(49)
Nearly all the time	1.8	(34)	2.4	(31)

¹ The *F*-test of over-all differences among means is significant at $p < 0.001$.

Admittedly, the line which separates departments is less of a boundary than the line which separates one organization from another. The person at the departmental boundary shares with his role senders in other departments certain organizational norms not shared by people outside the company. To the extent that such norms exist and are explicitly shared, the boundary dweller can invoke their power over his extradepartmental role senders. The normative structure of large organizations is often fragmentary, however, and the levels in the formal authority structure at which he and his role senders are united may be remote and inaccessible. IBM Converter, for example, develops computer programs that will make some of the work of other departments amenable to processing by electronic equipment. We shall see later how his immediate job crises center around the failure of these client departments to provide him with adequate aid or information; he recognizes this but feels unable either to persuade or to order the collaboration he needs. IBM Converter locates a major source of his stress in formal authority arrangements: ". . . you are working with people who are not directly under you, or to whom you cannot give direct commands."

A second source of IBM Converter's stress lies in the restricted understanding that the client departments have of his job. The organization has attempted to ameliorate this problem by appointing in the client departments liaison persons who are knowledgeable about IBM matters. Because these new positions have only modest status, however, and because they are new, the liaison people have little power within their own departments. When a crisis arises and IBM Converter needs

increased information and assistance from the client departments, a liaison man can understand and sympathize, but he is in a power position too low to do very much about it. In such crises IBM Converter must by-pass the liaison man and deal directly with the head of the client department to get what he wants. How does the liaison man feel about being thus by-passed? As IBM Converter understates the case: "He may resent it." For IBM Converter to act wholly through the directors of client departments would serve only to alienate the liaison people; acting through the knowledgeable but powerless liaison people, however, simply will not permit IBM Converter to get his work done. Knowledge is not always power, and a liaison person, however understanding, who has little power in his own sphere is hardly better than no liaison at all.

The complaint of being misunderstood figures largely in the conversations of persons in departmental boundary positions. Moreover, there is independent evidence that these complaints are founded in fact. Having prepared a Master Activities List for each position, we were able to compare the knowledge of each role sender regarding the focal position with the full requirements of that position as shown on the Master Activities List. When we made these comparisons, a marked association was apparent between the knowledge of role senders and the number of boundaries which separated them from the focal position. Every boundary within and between departments serves to reduce the role senders' knowledge of the focal job. The effects of this kind of organizational distance are particularly sharp for those role senders who have no specific liaison functions across departmental lines. Figure 6-1 illustrates these relationships.

Illustrations of this second persistent problem of persons at departmental boundaries—having role senders who do not understand the full requirements of the focal position—are plentiful in the interview protocols. IBM Converter describes such difficulties vividly, but at the same time recognizes that the factors which would encourage his role senders to understand his job better may be subtle and informal:

In our situation we are located downstairs and the clients are not located in this building. It's not a great distance, but it is still enough so that you can't have coffee every day. It might be more of a psychological barrier than a natural one.

What changes would IBM Converter like to see in the role senders who lie beyond this barrier?

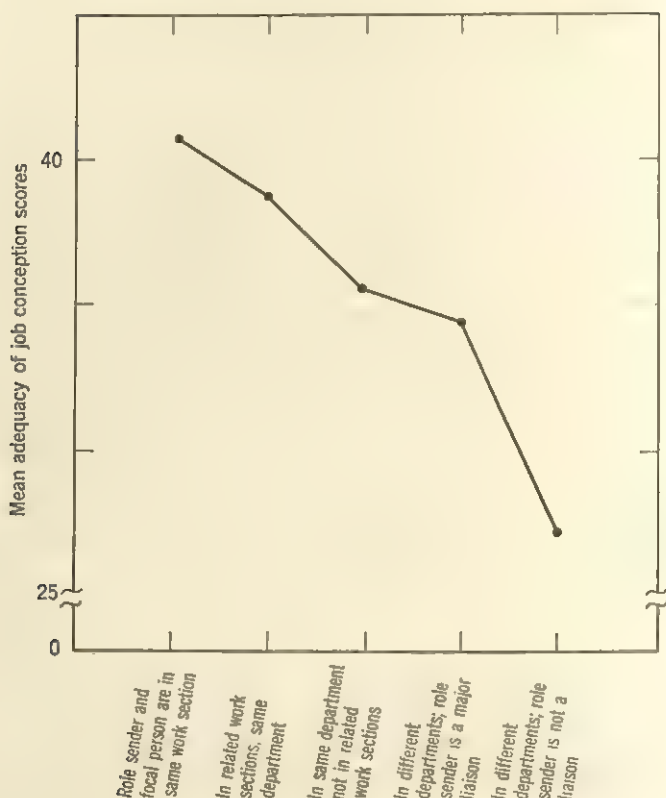


Figure 6-1. Mean adequacy of role senders' conceptions of focal positions in relation to organizational proximity (from the intensive study). *F*-test of over-all differences among means is significant at $p < 0.001$.

I think a sense of cooperation—maybe a greater understanding of the amount of work that is involved, the amount of effort that has to go into things.

He has made some overtures toward rectifying this lack of understanding on the part of his clients:

They have seen movies, but movies aren't long enough for what is involved. They aren't required to pay attention very closely. I think we will follow up with this. They have done it in some of the other groups with fair success. . . . Matter of fact, sometime in the past we have been talking about setting up a short IBM course for the people in one of the client departments.

In describing the attitudes of his computer staff, IBM Converter quite fairly recognizes that they might have their own blind spots regarding the work of the client departments:

I think that there the problem is that they look at it strictly from the machine point of view and aren't aware of the needs of the client department.

Yet virtually all role expectations directed to IBM Converter emanate from one of these two groups: his clients or the computer specialists themselves. His activities are completely defined by sendings from these two clusters of reciprocal misunderstanding.

Other focal persons, whose jobs have little in common with that of IBM Converter except for their location at a departmental boundary, tell similar stories of misunderstandings:

The marine department, from their point of view, would prefer to charter only the large dirty tankers. . . . We, on the other hand, have determined that our need is for small, clean ships where the rates are highest. Marine is telling us to do one thing and we're telling them we ought to do another thing. The obvious thing that is wrong is that they don't have possession of all the facts. They are looking at it from the facts they have available to them—the marine angle.

In this position we coordinate a lot of the activities of a number of affiliates. We try and provide the most economical distribution of crude products possible from the standpoint of the parent company. And we run into problems incessantly with representatives from individual affiliates who are always trying to protect their own position at the expense of other affiliates' positions and at the expense of the parent company. . . . And we have to fight them tooth and nail and this becomes discouraging after a while.

Both the quantitative data and the above examples emphasize the fact that each role sender develops a conception of the focal position which is almost inevitably biased by the relationship of his own organizational position to that of the focal person (see Chapter 10). In some of the interviews with role senders, it is possible to detect qualitative differences in their sendings which seem to reflect their peculiar biases. Take, for example, the complaints leveled against IBM Converter from various members of his role set:

From his superior—Because of his particular assignments and the clients he's dealing with, I think in some cases he might be a little tougher with them, and insist a little more on documentation.

From one of his subordinates—He should sell ideas to clients with more forcefulness.

From a second subordinate—I'd prefer he not let the client work so closely with him on detail work.

From another subordinate—I would like him to be a little firmer in dealing with clients. I'd like him to be not as obliging as he is to our client contacts, take a firmer approach in dealing with these people in his resistance to changing or catering to the whims of our clients.

But from the opposite pole, a client says—I would like to control the new system which is being set up, but as of now our department doesn't have the final say in this matter. I'd like him to follow our recommendations more than he is now. I would like him to be more open-minded and willing to accept my ideas and those of our department, especially relating to our ideas regarding setting up the new machine system in our department.

And from another client—I wish he'd ask us more often what we think when he's forecasting.

A person in a departmental boundary job is, therefore, likely to be confronted by role senders who are essential to his job, who are nevertheless imperfectly acquainted with it, and who are not subject to his control. These germinal sources of difficulty come to fruition in a variety of critical and stressful situations, generically similar to those faced by persons in organizational boundary positions. These situations can be categorized as problems of access to resources, inflexibility of role senders, and of coordination.

Most of the conflict episodes described by IBM Converter center around the failures of client departments to provide all the information he needs to work out their computer programs. Often the information is withheld at the time when he needs it most. Not only does information from client departments appear either at the wrong time or not at all; even when clients have supplied such information, they are likely to change their minds:

I was feeling anxious, because even before that we had developed a master record. And when we reached the stage of testing that, they decided they would like to have some changes made. And the time for making changes, for reviewing and making specifications for what they needed, took longer than what it should. So this was all backwards.

Yet his work must bend and sway in response to such changes and delays. At several points, IBM Converter attributes these aberrations to clients' failures to understand the limitations and abilities of computers, and to their not recognizing that his department also has work schedules it must meet. Ironically but understandably, IBM Converter's

clients complain about *his* failure to supply *them* with information at a time when they need it and in a form they can understand.

Biller has a job for which, in the words of one of his role set, "he has to have at his fingertips the information required to do his work." There are two major sources of this information: reports from subsidiary manufacturing companies for which he prepares billings and summaries of financial data, and an IBM data-processing center elsewhere in the company. Willing to assume responsibility when workers in his own department make an error, Biller must also bear the brunt of misinformation supplied by his extradepartmental sources:

Well, things that bother me considerably and cause stress, so to speak, are the amount of errors we see other people doing in the company, and in particular the data-processing center. Of course, we realize they are new at their jobs, but they have been working for several months now, and it's giving us a terrible headache. . . . They duplicate the punching of cards, duplicate the running of the machines, or they omit vouchers or facts, and send up statements to us that are incorrect—and these statements are sent out into the field—to customers. You can't realize the complications of something like that.

Eventually they'll find it out, and then supplementary statements are sent out; but in the meantime the overseas subsidiaries have given us the reports based on the previous statement that was wrong.

Just by chance, yesterday I picked up two IBM cards to get the reference of a certain customer. I wanted to see the documentation of the charge made, and on the IBM cards they have the customer's name and a code. Every customer has a code. Lo and behold, I got the documentation, and it was for an entirely different customer. And only because the coding was wrong for the customer. The machine is going to do what it is told. If it is given the wrong code, it's going to print some other customer. So it was made out to a Mexican customer, and it should have been made out to an Indian customer. Those statements have already been run. Those statements are going to go to the customers incorrectly. It was just by chance that I picked up these three cards, and two of them were wrong.

You just can't rely on the work people are doing. So we went to the people supposedly involved in the mistake, and from what I got it was that the number was called to her from across the room from someone else, that she misunderstood it, or the wrong number was called. That is very, very poor work. They should have on the desks a complete code of all the customers. There are many examples like that. It reflects back on *your* job. Something else that is done reflects back on *your* work.

Although it remained for Biller to untangle the billing mix-up, the erring department here was at least willing to accept the responsibility for its own carelessness. Other focal persons who must rely on infor-

mation from role senders outside their departments are less fortunate, as illustrated by the following horror story told by a superintendent of motor assembly.

We were running out of a certain kind of nut, a brass nut. So I asked an engineer if it would be OK if we used the same type of nut in a steel nut, of which we had plenty available. The engineer said "Yes, go ahead; we don't want to have to shut down." Later on we got complaints from the field that due to the heat in the exhaust that nut froze on the stud; and that every time they wanted to loosen up that choke and replace it, the nut would be frozen and the whole works had to be pulled out. So when it was checked back, we called that engineer down to the office and asked him if he remembered my talking to him about that nut some time ago. The engineer said "Yes, I remember something about." And I said "Well, now we have complaints from the field on it; I shouldn't have used them." And the engineer said "Well, if you were crazy enough to take my word for it—you're the guy who put them on—I didn't. You asked me, and you told me they were the same size nut and everything; I didn't think there was any difference. It's *your* responsibility."

In the above examples, role senders outside his own department created problems for the focal person by erring or falling behind schedule. A crisis in his own department, however, is particularly stressful to the person at the departmental boundary; he finds himself in the position of having to justify this delay or error to extradepartmental role senders who have an inadequate comprehension of the problems he faces on his job. IBM Converter, for example, speaks of his clients' intolerance of delays resulting from computer problems too complicated for them to understand or appreciate. Another focal person complains of role senders who can't understand why, if their own department is functioning on schedule, his is not also:

The inventory programs are set up on a "most probable" kind of basis. In other words, what you would expect probably two-thirds of the time. But it seems that in *our* area we are operating in the other one-third most of the time. Therefore we have a problem of communicating to people why we in the operating end are running into difficulty. And they, of course, think "Why are *you* in trouble? I mean, *we're* fine."

Even when each of several interdependent departments is functioning smoothly in its own right, the boundary person may find that coordinating his activities with those of surrounding departments is taxing. One such respondent complains of the disrupting delays enforced on his own decisions:

You've got to get the views of a number of people in order to resolve the problem. There's a great number of meetings and sometimes it's a problem to get hold of the person that you want to talk to in order to resolve the problem. Again, his time is not *his* own, so to speak; someone else might be calling a meeting that *he* must attend. And so it goes.

Furthermore, when the department of a boundary person interacts with a number of other departments, he must expend additional time coordinating opinions within his own department in order for him to present (or at least be aware of) the "departmental position" in dealing with others. Failure to achieve departmental unity can put him on the spot in his extradepartmental negotiations:

My superior might attend a meeting, which I'm not attending, and quote certain figures which I'm at a loss to understand how he arrived at. It comes back to me from people who attended the meeting: "Well, this isn't what you were telling us. Your man said *this*. So how about it?"

Summary

A *boundary position* is one for which some role senders are located in a different social system from the focal person. They may be in another unit of the same organization as the focal person, or in another organization altogether. Boundary positions are peculiarly apt to entail various kinds of role conflicts. Each boundary conflict takes its characteristics from the groups between which the boundary is interposed—line versus staff, company versus suppliers, company versus customers, first versus second shift, and others. Generally, however, stresses at the boundaries of either companies or departments have as central elements problems of power and misunderstanding.

Lacking formal power over role senders outside his work unit, a person at the boundary has a reduced ability to guarantee that the performance of these outsiders will be as he needs and wishes. In compensation for this lack of formal authority, a boundary person relies heavily on the affective bonds of trust, respect, and liking which he can generate among the outsiders. But these bonds are unusually difficult to create and maintain at the boundary. For the outsiders, the failings of a person's unit are all too easily identified as failures of the person, thus weakening their affective bonds with him. In a similar manner the deficiencies of people outside the unit of the boundary person are often taken as deficiencies on his part by members of his own unit.

Such difficulties in disentangling personal faults from formal responsibilities and in distinguishing both from events in which the boundary dweller is an innocent and powerless spectator, are the products of the role senders' inadequate understanding of boundary positions. An additional consequence of such misunderstanding is the failure of role senders, especially in other departments, to appreciate the urgency or necessity of a boundary person's requests to them. They are likely to present him with self-interested demands and to be intolerant if these demands are not met.

A person in a boundary position is faced, therefore, with a sizable body of role senders whose demands are hard to predict and hard to control. These demands will be generated by the dynamics of other departments or organizations and will shift with the vicissitudes of those groups. Moreover, the demands are likely to be untempered by an adequate understanding of what such shifts mean for the boundary person. Most difficult of all, the boundary person faced with such demands has at his disposal only limited power resources with which he may attempt to induce their modification.

Innovative Roles

CREATIVITY always implies change. In organizations the "accepted policy" is accepted by definition and bolstered by precedent and ideology. The newly created policy must be justified prior to its acceptance. Organizations vary considerably in their receptivity to change, but it is the change and not the status quo which must be newly justified.

Organizational theory has traditionally emphasized those properties of formal organizations which tend to preserve the status quo, and special emphasis has been given to the process of bureaucratization. In a bureaucratic structure activities are distributed in a fixed way as official duties, and behavior is oriented according to rationally determined rules. The power to give commands required for the discharge of these activities is located in a hierarchical structure of formal authority. The demand for control and coordination in bureaucratic structures frequently takes the form of an increasing emphasis on rules as a means of ensuring reliable behavior. But rules-oriented behavior, necessarily based on the requirements of the past, may not be suited to changing conditions. Merton has summarized the processes whereby "efficient" bureaucracy may in the face of change limit its own adaptability:

An effective bureaucracy demands reliability of response and strict devotion to regulations. Such devotion to the rules leads to their transformation into absolutes; they are no longer conceived as relative to a given set of purposes. This interferes with ready adaptation under special conditions not clearly envisaged by those who drew up the general rules. Thus the very elements which conduce toward efficiency in general pro-

duce inefficiency in specific instances. . . . These very devices which increase the probability of conformance also lead to an over-concern with strict adherence to regulations which induces timidity, conservatism and technicism (1956, p. 156).

Such a description, taken by itself, would lead us to predict for the bureaucratic organization adaptative abilities roughly comparable to those of the dinosaur. Yet many bureaucracies show a remarkable viability in the face of changing circumstances. Their viability suggests that even organizations largely oriented toward fixed rules may be equipped with the resources for making decisions which depart from these rules or alter them. In bureaucratic organizations such departures from rules are not universally permitted, but appear instead in particular organizational positions or substructures. Selznick (1943) singles out informal organizational structures as the primary instrument for modifying organizational goals and policies in the face of changing situational demands. Katz and Kahn (1962) argue that positions at the organizational boundaries are directly exposed to changing external requirements, and that the occupants of such positions become proposers of organizational change. There is evidence (Chapter 9) that organizational positions differ in the degree to which rules-oriented behavior is expected of their occupants; moreover, these differences in expectations are determined by the position of the focal person and his associates in a number of organizational substructures.

Our present focus, however, is on those organizational roles which demand innovative solutions to nonroutine problems. Such roles complement the more routinely rules-oriented roles of the rest of an organization and increase the adaptive abilities of the organization as a whole. In a sense the innovative roles represent patterned organizational deviance. It is as if the bureaucracy, recognizing the dangers of its rigidity, attempted to build into itself a capacity for change, but to do so in a way wholly consistent with bureaucratic structure and organization. What way could be more compatible than institutionalizing and assigning to certain organizational positions the functions of being flexible, sensing changes in the outside environment, and initiating appropriate responses in the organization? To a degree the solution works, but with an almost inevitable cost. The persons who fill these organizationally created "change" roles must become change oriented in order to fulfill the requirements of the role. Not to do so would constitute failure; yet in doing so such persons are likely to find themselves at loggerheads with the remainder of the organization—often including its largest and most powerful structures.

To select those roles for which demands for nonroutine problem solving were high, three coders reviewed the Master Activities List (Appendix M) for each focal position, and rated on a nine-point scale the importance to that position of activities involving creative solutions to problems for which there were few organizational rules or precedents. The average intercorrelation among the three sets of ratings was .60. For the present analysis, however, we have dichotomized all focal positions according to the magnitude of the innovative demand. For this simplified task, coders were in agreement in more than 90 per cent of the determinations. Among the focal positions coded high in the demand for innovative solutions were: research physicist and engineer; systems analyst; mathematician; work-standards engineer; long-range forecaster of company activities; and a position with the single task of developing improved ways of handling materials.

If roles demanding innovative solutions to problems tend inherently to disrupt the organizational status quo, occupants of such roles are likely to find themselves in the tension-producing situation of being in chronic conflict with those about them. The data indicate that this is indeed the case. First, that the occupants of such roles are expected to deviate from organizational norms is indicated by the negative correlation ($r = -.43$; $p < 0.01$) between the importance of innovative decisions to a role and the average expectation of the role senders with regard to the factor of rules orientation (Chapter 9). Second, the degree to which a given role demands innovative activity is associated significantly and positively with both the degree of role conflict ($p < 0.01$) and the amount of tension the role occupant experiences on the job ($p < 0.05$).

Of the various forms in which role conflict is encountered (Chapter 2), two emerge as characteristic of the high-conflict, innovative roles: interpersonal conflict and intra-role conflict. Each of these takes a special guise in such cases. The interpersonal conflicts of the innovator are fought out around his proposals for innovation, a kind of continuing battle of new guard versus old. The intra-role conflicts of the innovator stem from his engagement and commitment to the creative, nonroutine aspects of his job and his corresponding disinterest and disdain for the routine or uncreative demands placed upon him; as a result he experiences a conflict between these two categories of role requirements, both legitimate and unavoidable, but only one truly ego satisfying.

New Guard versus Old Guard

In almost every process of organizational change there is the new guard advocating innovation and the old guard urging retention of the status quo. The individual in an innovatively oriented role casts his lot with the new guard, but there is always the old guard to resist by virtue of its vested interest in present organizational procedures. In the interpersonal conflicts between persons in innovative roles and the often numerous and powerful old guard lie many of the stresses of innovative roles.

As IBM Converter says, one must in industry inevitably deal with others of dissimilar orientations, and one must recognize this fact:

The research worker who prefers to have his own office, work by himself with no interruptions, certainly is not going to make a very capable systems analyst. You have to try and picture what others are thinking, understand their situation, their relationship within their own problem, understand their problem and try to devise your own answers and understand why they are acting as they do.

Since in introducing change one steps into new areas, everyone else feels *he* has an equally valid opinion about these new matters:

This is more usual than not: I converse about a problem with someone, and at least when they first hear the problem, they have their own set of ideas about how one should go about it. So in the work I do, I'd say it's more often than not that people, at least initially, disagree with what I've done, or what I'm doing.

The opinions of these people, moreover, usually are opposed to change. IBM Converter describes the effects of his programming on the attitudes of his clients:

I have the feeling in some cases that there is a reluctance to accept the change. People are often reluctant to change for several reasons. They may not fully understand what is proposed, although we have been trying to keep everyone aware of the changes.

A business forecaster describes one of his company's old guard committees:

When we first set up our work, they used to be a Court of Inquisition rather than a committee and everything we said was tested by fire. They

challenged and tried to discredit, and, oh, they used to beat us unmercifully.

The conservatism of the old guard takes one of two forms, according to respondents. In its first form this orientation is toward the very statistical precedents that are for the person in the creative, innovative role the point of departure, not the terminus. A work standards engineer thus complains about his superior's restricted orientation:

I've been around machines for about, well, ever since I got out of school I've been in work standards. It's been about twelve or thirteen years. And our supervisor, he was a staff man. He was strictly a chart man, a graph man, and stuff like that.

In a second type of confrontation with the organizational old guard, the innovator must argue with the "wise old" role sender who thinks his experience constitutes better grounds for a decision than any new information the innovator may conjure up:

Q: What are the stresses about your job?

A: The first one is the differences that result from people with so-called "experience" versus what I would call more objective analysis.

For example, a person who has spent forty years in sales, who has been a successful sales person in several areas and now is a major manager of a department here. Now he may never have spent any time trying to—let's say—actually working in the field of connotative analysis of the forces that affect sales, but he has an inherent "feel," as he calls it: "I feel the market will go so and so."

Frequently we find that his "feel," because it comes from a person of such statural level in the company, is enough to say that this "feel" should overcome objective analysis.

It creates a problem in diplomacy as well as a problem in communication and education to get across to the person who might take a strong stand on the basis of this so-called "feel" or experience!

This is a revealing statement, not only for what it tells of the conflict between innovators and their opposition, but also for what it suggests of the qualities required to cope with the stresses of the innovative role. One of these is self-confidence, which in the above quotation appears as undisturbed reliance on objective analysis and depreciation of experience and intuition. This is typical of focal persons in creative jobs, whose self-confidence scores in the face of role conflict are significantly higher than those of persons chosen for more routine work ($p < 0.02$).

Equally typical is the distrust of others in the organization, especially those whose judgment is nourished from other sources and other kinds of experience. People in creative positions are less trusting of their role senders, irrespective of the degree of conflict ($p < 0.06$). It is likely that complex processes of selection are at work here, and also that the person assigned to an innovative job finds soon enough that he must listen to his own voices and be prepared to distrust those of others.

Interpersonal conflicts of old guard and new, though present in most roles which demand innovative decisions, vary in intensity in accordance with the orientation of higher management toward innovative functions. One focal person in an innovative role describes a case which emphasizes the importance of management's orientation in the continuing clashes between old guard and new:

Q: Do you feel that high management in the corporation, even higher than the division, are sufficiently attuned to the technical creativity of the people?

A: They are in some places. I think they are here because a lot of the managers have been engineers and have gradually gone up into the administrative positions. In some companies, they're not—don't know anything about the technical viewpoints of the people. They figure they belong in ivory towers.

Research by Pelz (1957) and Meltzer (1956) demonstrates the influence of management orientations on the productivity of research scientists. Their data indicate the importance to scientific productivity of the amount of freedom and research funds allotted to the scientist and the amount of communication of the scientist with his chief. Of this contact between the scientist and his chief, Pelz says:

We are becoming more and more convinced that this active interest in ongoing work, combined with a hands-off policy concerning its direction, is one of the most fruitful things that a research chief can do (1956, p. 35).

Most persons who occupy innovative roles are exposed to environments less supportive and less sensitive to research evidence than Pelz' respondents, all of whom were employed in research organizations. It seems likely that when innovators encounter lack of support, their reaction is to seek some isolation from their role senders. In any event, our data show that persons in creative roles have significantly

less communication than others with their role senders ($p < 0.02$).

The special problems of a research-oriented innovator in a non-research organization are well described by one focal person. In his view solutions to problems are tolerated only so long as they are slanted in a particular direction:

Too strong a stand at this point makes you look negative in attitude to the people who are asking you to do the job. And in our company negative attitudes, shall I say, are quite unacceptable.

They like "realism," but sometimes they aren't quite sure what they mean by "realism." . . . A negative attitude is something that just isn't accepted. They just don't like it and anything that has any connotation of being a negative attitude, even on a superficial basis, is frowned upon and rejected.

So we find ourselves walking a tight-rope.

Handler (see Chapter 4) finds himself in an even more unsympathetic organizational environment. He insists that his ideas are *never* accepted by management and stand little chance of being accepted in the future. His functions are, in his own words, window dressing. The company has decided that someone should develop more scientific approaches to material handling, but balks at the prospect of any substantial changes in this area. The organization has ostensibly committed itself to scientific principles of self-improvement, but summarily rejects any suggestion of change. Handler feels that his scientifically oriented activity is primarily a gesture made by the company in developing a progressive public image. He has insufficient power to enforce any decisions he makes and, in the particular plant to which he is assigned, those in charge reject his recommendations—if they read them—on technicalities. Such a managerial attitude has predictably detrimental effects on both the focal person and his subordinates:

It makes my job doubly difficult, because, although I think I have mentally reconciled myself to this sort of thing, personally I feel that we can go just so far. But when this occurs, oh, I have a little bit of mental turmoil. But actually in a short period I tell myself—well, that's behind us now and what can we do for the troubles that are facing us in other areas.

But that is not true with my people. It makes quite a personnel problem. And I have people right now who feel they're not doing the work they're capable of for this reason. Because it is a feeling on their part that the end result is always the same. "So let's do a sloppy job. Why waste time?" To them it is wasting time.

Handler here expresses another of the properties of the innovative role found in our sample of focal persons. He suggests that his "people," confronted with conflict and lack of success, become uninvolved and apathetic. The comfort of such a response, however, is not for him; he must tolerate instead "a bit of mental turmoil." Although his fight with the old guard disturbs him, he is too committed to his job to withdraw from this fight. A similar attitude characterizes many other individuals in innovative roles. Although, as we have seen, these individuals are both under high conflict and experience considerable tension, they are nevertheless more highly involved than others with their jobs * ($p < 0.05$). Moreover, they attach to their jobs more importance relative to other areas of life than do people in less innovatively demanding roles ($p < 0.05$).^{*} Although innovative roles are difficult ones, they are not without considerable intrinsic rewards. These roles have considerable meaning in the lives of these people, probably because creative jobs are intrinsically more meaningful and because persons come to such jobs as a result of a long process of self-selection and selection by others. One focal person expresses the gratifications provided by his otherwise difficult innovative job in the following terms:

You may not have all the tangible things that you have when working with your hands or creating things in that manner. But you *do* have something that you have created—something that is continuing—something that is existing.

Creative versus Uncreative Activities

The second conflict characteristic of jobs demanding creative, innovative decisions is of the intra-role type. Especially in organizations where rules-oriented, routine activities predominate, innovative roles carry with them their share of routine activities. Persons in such roles generally express greater ego satisfactions with their creative activities than with the routine tasks which they must perform.

Many of the more routine demands on the innovators require skills in administration and human relations which they often feel they do not possess. The substantive complaints of role senders about the innovators are heavily weighted with references to their inadequate

* The measures of degree of job involvement and degree of importance attached to the job relative to other areas of life were based on materials from the second focal interview.

performance of their noninnovative, routine activities. These focal persons are seen by their associates as either not spending enough time on these activities or not performing them up to organizational standards. One respondent says:

There are people who are highly proficient in technical things and can't get along with others. There's a place for them in the ivory tower, in theoretical work where they wouldn't have too much contact. But the way things are set up now, why you *do* have to have some relations with other people. This is an important factor.

Interpersonal skills may be closely tied to innovative success or failure. Another respondent describes the necessary repertoire of ancillary skills which the innovator must possess:

There are a lot of things along this line: being able to speak better and get along in groups better and learning to write better and convince people—shall we say convince people against their will, or at least guide them—or learn to influence people's thinking on the way they do things.

Conspicuous among these interpersonal skills are the ability to communicate lucidly with people who do not think in the same terms, and the ability to "sell" one's ideas forcefully. Both abilities become especially critical when the person in the innovative job is in a position of low power or is facing frequent conflicts with the old guard. IBM Converter says:

There have been times when I feel they don't understand it. And this gets back to the problem of the closed class in the orientation. It may be that they have not yet reached the state of proper orientation as far as computer ability is concerned to understand work with a computer so they are able to understand what you are talking about.

People in creative positions are not only misunderstood; in turn they are likely to have difficulty in understanding the language of administrators:

- Q: Are there any particular people you have to deal with whom there is a greater difficulty in getting clear with?
- A: Well—I think when I have dealings with anything concerning a proposal (which this focal person regards as an administrative function) I, uh—this is not so much a matter of communications as it is a failure on my part to grasp what it is that the people who want the proposal want. I don't seem to talk their language.

The necessity of being able to sell one's ideas to unsympathetic others is described by one respondent as follows:

I'm not feeling secure because I don't think my way of doing this is appreciated by my superior. My inclinations and attitudes, the sort of work that I would like to do aren't appreciated by my superiors. There is the need continually to sell what one does or what one wants to do.

Although the necessity for developing the skills of interpersonal communication and salesmanship is approached by some of these respondents with interest, the necessity for handling very routine administrative matters is largely regarded by them with distaste. Two respondents phrase ideas along these lines as follows:

I might want to go as far as department head, but I don't aspire to be in top management and get into all the red-tape type of things.

This is very subjective, but my personal feeling is that I wouldn't want to have an assignment where I was in routine work regardless of the degree of efficiency required. If it were purely routine, I wouldn't want it and I would possibly—even if it were a high level job in a well-known company—I would say "the hell with it." I would rather go into business for myself selling shoes than do a high level job on a routine basis.

We interpret these remarks as emphasizing the innovator's depreciation of routine rather than any lack of ambition. That creative jobs tend to be higher in organizational rank than routine jobs (Chapter 8) suggests that the holders of these jobs have at least in the past not lacked ambition. Additional data indicate, moreover, that individuals in innovative roles are more likely than others ($p < 0.05$) to be currently oriented toward achieving high status (Chapter 17).

Complaints of focal persons about their routine administrative activities usually are directed at the interference of these routine activities with their more creative efforts. The most prevalent of these complaints is that the amount of time consumed in routine matters reduces the time available for the preferred creative activities. Other persons in creative jobs complain that having to do routine affairs destroys the continuity of their creative activity. One respondent explains that his administrative functions restrict his autonomy. When he works in his own specialized decision-making area he is the authority, but when he acts in his capacity of administrator he must follow the dictates of others. His interpretation is supported by the general finding that persons in creative jobs attribute less power to

their role senders. In part, this may be a kind of defensive deprecation. It is plausible, however, that the innovative and creative activities should be less susceptible to direct influence by role senders, who are often outside the circle of special knowledge and technique which is at the core of the creative job.

Summary

In a bureaucratically oriented organization a person whose role demands innovative, creative decisions to nonroutine problems is likely to be confronted by both intra-role and interpersonal conflicts.

His intra-role conflicts arise because an organizational position which demands nonroutine activities is likely to include many routine administrative activities as well. A person in such a position finds himself proceeding along administrative paths governed by existing rules and at the same time is expected to be oriented toward innovative decisions which run counter to these same rules. Moreover, persons in creative roles are frequently expected to possess ancillary skills in administration and human relations which they may find themselves lacking. Even if these ancillary skills are possessed in sufficient measure, their required application is time consuming and disrupts the continuity of the more creative activities. So it seems, at least, to the focal person.

A similar conflict between routine activity and rules orientation, on the one hand, and innovative behavior, on the other, appears on an interpersonal level. Persons occupying innovative positions in basically conservative, rules-oriented organizations find themselves in open conflict with those who have a vested interest in the status quo. Each change suggested by the innovator must be justified for persons who oppose such changes on the grounds that precedent is lacking or that the changes violate their own experience. The innovator is thus placed in a situation where important others regard him as a threat to their security and place upon him the burden of continuing defense and justification.

Such innovative roles, though conflictual and tension-producing for the persons occupying them, are nonetheless functional for the organization as a whole. They provide adaptive flexibility for what might otherwise be a dangerously rigid bureaucratic structure. The deviance of the innovative role is patterned by organizational demands, and there is some acknowledgment of this fact. There is a negative correlation between the innovative demands made of a person and the

amount of rules-oriented behavior expected of him by his role senders. In short, every organization is faced with the double problem of maintaining its integrity in the face of change and yet adapting to these changing circumstances. These two inimical goals tend to become embodied in different sets of roles, and a conflict between goals is thereby transformed into an inter-role or intergroup conflict.

Rank and Status

RELATING STATUS to job adjustment is like splicing rope. At the onset, one holds in each hand something which appears to be an entity. Yet before proceeding to splice, one must separate the strands of each rope so that they may be properly joined. Status and job adjustment likewise seem at first glance to be unitary concepts. On closer examination, however, each is a complex intertwining of smaller units. To seek only the over-all relationship between status and job adjustment would neglect the possibility of an efficient splice in favor of tying a single and less durable knot. It is preferable to ask more specific questions; the association between status and adjustment is likely to vary as a function of what aspects of status and criteria of adjustment one happens to be talking about.

Three approaches can be distinguished in the attempts to interpret the phenomena of status. The first of these approaches concentrates on the personal characteristics of individuals at various status levels. Applied to organizations, this approach would lead us to ask what types of people are most likely to be selected into positions of high status, rather than what demands are made of individuals in such positions.

A second approach emphasizes the importance of empirical correlates of status measures, and the interpretation of such correlations generates a rich complex of intervening variables. A positive correlation between social status and mental health, for example, is interpreted by reference to "social disorganization" in lower-class ecological areas. The prevalence of certain psychosomatic disorders in high-status jobs is explained on the basis of the greater "responsibility" which these jobs entail.

A third approach plunges more directly into the value judgments which are at the core of status differences. High versus low, successful versus unsuccessful, powerful versus weak, important versus unimportant, superior versus subordinate—all are evaluative distinctions. It is the evaluative aspect of status to which the third approach is addressed.

The consequences of status for the individual are potentially understandable in terms of one or all of these three approaches. The problem of which approach and which intervening variables to invoke in the explanation of any particular status-behavior relationship is, like the problem of invoking intervening variables generally, to be solved by reference to the law of parsimony and to the theoretical and empirical plausibility of the explanation generated. When, therefore, the following pages report a number of associations between status measures on one hand and measures of job adjustment on the other, the interpretations advanced for these associations must be regarded as only a few of many admissible explanations.

Status and Stress

The national survey and intensive studies employed somewhat different measures of status, as required by the characteristics of the two samples and the limitations of the two methods. In the national survey male wage-and-salary workers were classified into six groups on the basis of their occupational status: professional and technical persons, managers, clerical and sales people, craftsmen and foremen, machine operators, and unskilled laborers and service workers. Listed one after the other, these occupational categories do not represent a continuum in the usual sense of this term. They vary along several related dimensions: prestige, income, the nature of the work, and the way of life implied by a given occupation.

Such groupings, though suitable for our representative national sample, failed to differentiate finely enough among respondents in the intensive study; most focal respondents were either managers or foremen, with a few in the professional-technical group. As a result a somewhat finer set of categories was applied to these respondents, with status being treated in terms of organizational rank. Four levels were distinguished:

Top Management: Heads of department; assistant managers of major departments or divisions; top four corporate levels

Middle Management: Section heads, assistant managers of smaller departments or divisions, technical and scientific specialists

Second-level supervisors: General foremen and superintendents, second (and some third) level supervisors in production units

Foremen: First-level supervisors, direct supervisors of hourly workers

Although the code of occupational status ranks respondents according to their relative prestige in the eyes of the population at large (NORC 1947), the code of organizational rank takes as its frame of reference the respondent's position in his own company. Thus the professional-technical group has been shown to have the highest status of the six in the view of the general population; but the professional-technical people in the intensive study often held positions considerably below that of the top management group on a number of status-relevant dimensions (prestige in the company, income, power, and responsibility).

Self-Reported Health

Among the studies which have adopted the third approach to status-behavior relationships, focusing on the evaluative aspects of status rankings, are those of Kasl and French (1962). In studies of two large companies, they found skill level to be inversely related to frequency

Table 8-1 Self-Reported Health in Relation to Occupational Status (from the national survey)

<i>Occupation</i>	<i>Percentage of Persons Reporting Themselves in Excellent Health¹</i>	<i>Percentage of Persons Reporting Themselves in Poor or Fair Health</i>	<i>N</i>
Professional, Technical	83	17	(52)
Managerial	97	3	(37)
Clerical, Sales	85	15	(60)
Craftsmen, Foremen	65	35	(85)
Operatives	67	33	(81)
Unskilled, Service	65	35	(49)

¹ 2×6 chi-square is significant at $p < 0.001$.

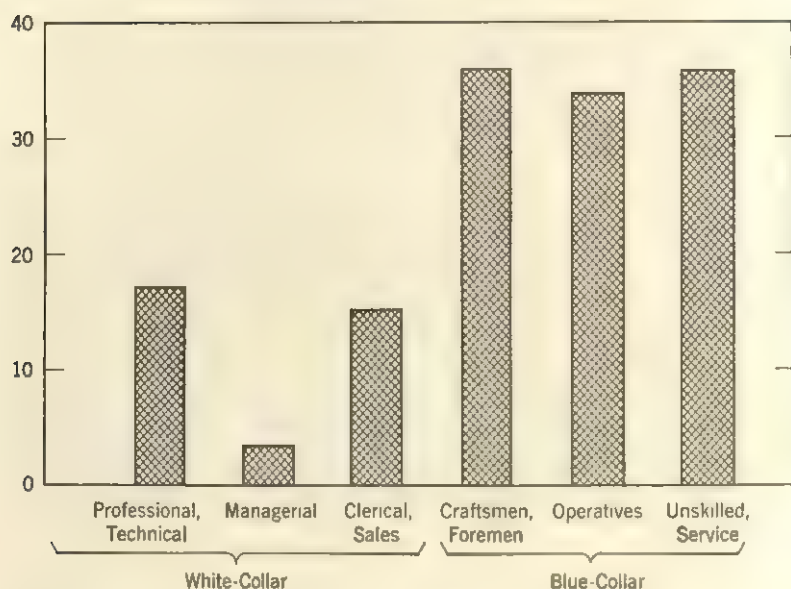


Figure 8-1. Percentage of respondents reporting themselves in only fair or poor health in relation to occupational status (from the national survey).

of visits to the company dispensary. Longitudinal data in these same two companies also revealed a positive relationship between status and health. Men who moved to jobs of higher status showed decreased frequency of dispensary visits; men who moved lower in the status hierarchy increased the frequency of such visits.

Data from the present national survey indicate a similar association between status and a global indicator of physical health. Table 8-1 shows that respondents reporting themselves to be in only fair or poor health are most likely to be found in low-status occupational groups. Figure 8-1 suggests further that the biggest difference in self-reported health occurs between white-collar workers and those whose positions are more closely tied to blue-collar activities (including foremen). Thirty-four per cent of the blue-collar respondents report themselves to be in something less than excellent health, while only 13 per cent of the white-collar workers do so. Moreover, these differences persist even where the economic advantage lies with the blue-collar workers, as in the comparison between clerical workers and foremen.

The interpretation placed on their data by Kasl and French appears equally applicable to the present findings. Invoking self-esteem as the principal intervening variable, Kasl and French hypothesize that:

Occupants of high status jobs will have a favorable objective public identity, that is, high objective public esteem. Objective public esteem largely determines subjective public esteem, which in turn strongly affects self-esteem. The occupant of a high status job will also tend to have a favorable self-concept; that is, he will have high self-esteem because he will tend to perceive himself in the more highly valued regions of his . . . occupational subidentity (1962, p. 76).

In support of this interpretation, Kasl and French demonstrate a positive correlation between status and self-esteem, and a negative correlation between self-esteem and frequency of dispensary visits. Status, self-esteem, and a general indicator of physical health are bound thereby into an interrelated network, part of which is replicated (with the use of a different health measure) in the present national survey.

Job Satisfaction

A number of previous studies have demonstrated positive associations of job satisfaction with occupational status (Gurin, Veroff, and Feld, 1960) and organizational rank (Mann and Pelz, 1948; Katz and Kahn, 1952; Morse, 1953). Although neither the present data from the national sample nor the intensive study revealed any status-associated differences in the level of reported job satisfaction, the national survey produced some provocative findings with respect to the *stability* of job satisfaction as a function of occupational differences. Respondents were asked, "Compared to the way you felt when you first started

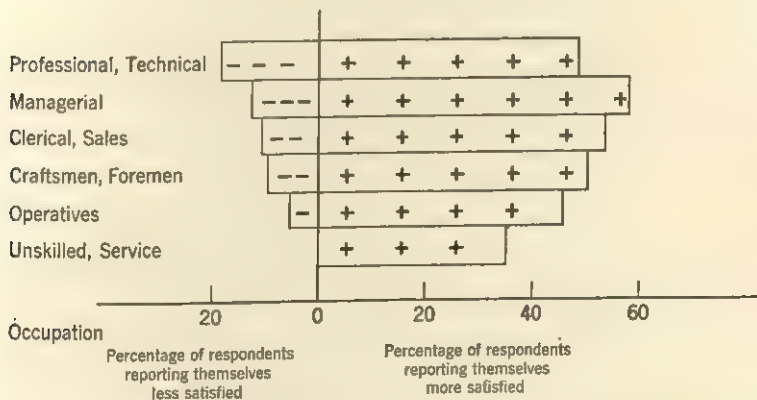


Figure 8-2. Changes in job satisfaction in relation to occupational status (from the national survey).

working on this job, would you say you feel less satisfied, more satisfied, or about as satisfied as you used to be?" Figure 8-2 presents the percentage of respondents in each of the six occupational status groups, indicating that they had become either more or less satisfied with their jobs. Reading down the right side of this figure, one would be likely to form the impression that, with the exception of the professional group, increases in satisfaction are positively associated with occupational status. But reading down the left side, one could equally well conclude that status is positively associated with decreases in satisfaction since beginning the present job. Both impressions would be equally correct, as Table 8-2 indicates. High-status respondents are more likely than those of lower status to report changes in satisfaction in *both* negative and positive directions. Among respondents in the lowest-status levels, the majority (66 per cent) report no change in their level of job satisfaction over the years, while among respondents of highest status the majority (64 per cent) report just the opposite.

Why should the job satisfaction of respondents high in occupational status be more labile? One answer to this question may be found in some earlier national survey data presented by Gurin, Veroff, and Feld (1960). The authors interpret their data by reference to a distinction between ego and extrinsic job motivations. Ego motivations are defined as those which represent "a personal involvement in the job, some expression of the self in the job,"—for example, attitudes toward the kind of work one does and the opportunities for expressing

Table 8-2 Percentage of Respondents Reporting No Change in Job Satisfaction in Relation to Occupational Status (from the national survey)

<i>Occupation</i>	<i>Percentage Reporting No Change</i> ¹	<i>N</i>
Professional, Technical	36	(52)
Managerial	27	(37)
Clerical, Sales	34	(60)
Craftsmen, Foremen	41	(86)
Operatives	50	(81)
Unskilled, Service	66	(49)

¹2 × 6 chi-square test is significant at $p < 0.01$.

responsibility and competence. Extrinsic job motivations are those centering around more mundane matters: money, job security, and working conditions. Having operationalized this distinction by coding statements of respondents as to what they liked or disliked about their jobs, Gurin, Veroff, and Feld report that "occupational status is strongly (positively) related to the amount of ego gratifications in the work, and the importance of such gratifications as things one looks for in a job." A second finding presented by Gurin and his colleagues is also relevant to the present data. In coding responses to a standard question about job satisfaction,* they added to the usual categories (very satisfied, satisfied, neutral, dissatisfied) one unusual code—"ambivalent." The ambivalent response was most typical of respondents who mentioned seeking only ego satisfactions in their jobs. Putting together these two positive associations—between status and the seeking of ego satisfaction on the job, and between the seeking of ego satisfactions and ambivalence in job satisfaction—one would be led to conclude that the greatest ambivalence and instability in reported job satisfaction would be found among workers high in occupational status, a conclusion borne out by the data in Table 8-2. In short, as one investigates respondents progressively higher in occupational status, one deals with individuals whose aspirations for job satisfaction are increasingly great and whose criteria for a satisfying job are increasingly sophisticated. As a result the job satisfaction of these individuals is likely to be less stable over time than that of persons in lower-status occupations.

Tension

The above data on self-reported health and job satisfaction serve to amplify a point made in the introduction to the present chapter: the direction of association between status and job adjustment depends on the particular criterion of adjustment one happens to be talking about. Occupational status has been shown to be positively correlated with a criterion of health and negatively correlated with the stability of attitudes towards one's job.

Relationships between status and job adjustment are encountered again when we move from the adjustment criteria of reported health and satisfaction to that of experienced tension. Data from both the national survey and the intensive study indicate that experienced tension and strain increases monotonically as a function of status. Table

* Taking into consideration all the things about your job, how satisfied or dissatisfied are you with it?

Table 8-3 Mean Tension in Relation to Occupational Status (from the national survey)

<i>Occupation</i>	<i>Mean Tension</i> ¹	<i>N</i>
Professional, Technical	2.0	(52)
Managerial	1.8	(37)
Clerical, Sales	1.8	(60)
Craftsmen, Foremen	1.7	(86)
Operatives	1.5	(81)
Unskilled, Service	1.5	(49)

¹ The *F*-test of over-all differences among means is significant at $p < 0.001$.

8-3 presents the positive relationship between occupational status and the tension index of the national sample, and a similar relationship between tension and organizational rank is presented in Table 8-6 for the intensive study.

Some Intervening Variables: National Survey

Respondents in high-status occupations are, according to the preceding data, more likely than low-status respondents to experience high tension with respect to their jobs, to be less stable in their over-all feelings of satisfaction with these jobs, and to feel that they are in excellent physical health.

At the beginning of the present chapter three different approaches to interpreting such associations between status and responses to it were described. Two of these approaches were invoked above, when the effects of status on self esteem were discussed and when different motivational orientations of individuals at various status levels were hypothesized. The following pages will concentrate largely on the third approach to the understanding of status and responses to status, presenting some intervening variables in the form of job characteristics which are related to both status and stress.

Earlier chapters have identified three job characteristics which are likely to prove stressful: the necessity for frequent contacts beyond the boundaries of one's department, demands for frequent business

contacts beyond the boundary of one's company, and demands for innovation and creative problem solving. Although all three variables were assessed in the intensive study, only measures of the two boundary variables were attempted in the national survey. No association was found between occupational status and frequency with which national sample respondents crossed departmental boundaries, but Table 8-4 indicates a significant positive association between occupational status and frequency of contacts outside one's company. A break in this relationship occurs only with respect to the professional-technical group. In the present sample, the majority of this group consists of technicians who perform specialized functions in business positions that demand few extracompany contacts.

This professional-technical group is also somewhat deviant with regard to the relationship between occupational status and supervisory responsibility, described in Table 8-4. Although the data suggest a generally positive association between status and supervisory responsibility, two occupational groups constitute exceptions to this trend: the professional-technical and, reasonably enough, the group which includes foremen.

The introduction of the supervisory variable in this context suggests that supervisory responsibility, like the crossing of company boundaries, makes for a stressful job and can help to explain the re-

Table 8-4 Frequency of Contacts Beyond Company Boundary and Extent of Supervisory Responsibility, in Relation to Occupational Status (from the national survey)

<i>Occupation</i>	<i>Mean Frequency of Contacts Beyond Company Boundary</i> ¹	<i>Percentage of Respondents with Supervisory Responsibility</i> ²	<i>N</i>
Professional, Technical	2.4	60	(53)
Managerial	4.1	89	(37)
Clerical, Sales	3.3	35	(60)
Craftsmen, Foremen	2.1	51	(86)
Operatives	1.7	23	(83)
Unskilled, Service	1.5	12	(50)

¹ The *F*-test of over-all differences among means is significant at $p < 0.001$.

² 2×6 chi-square test is significant at $p < 0.001$.

Table 8-5 Tension and Job Worries in Relation to Amount of Supervisory Responsibility (from the national survey)

<i>Supervisory Responsibility</i>	<i>Mean Tension</i> ¹	<i>Percentage of Respondents Reporting Job Worries</i> ²	<i>N</i>
Respondent has more than one level below him in the supervisory chain-of-command	2.0	72	(56)
Respondent supervises only immediate subordinates	1.8	66	(97)
Respondent has no supervisory responsibility	1.5	44	(216)

¹ The *F*-test of over-all differences among means is significant at $p < 0.001$.

² 2×3 chi-square test is significant at $p < 0.001$.

lationship between status and stress. This is indeed the case, but a link in this causal chain remains to be demonstrated—namely, that the possession of supervisory responsibility is itself associated with experienced job stress. Such a demonstration is provided by Table 8-5, which presents the associations between supervisory responsibility and two measures of experienced stress.* Three degrees of supervisory responsibility are distinguished in this table: respondents who have no supervisory responsibility; respondents who supervise only subordinates who themselves have no subordinates; and respondents whose immediate subordinates also have supervisory responsibility.

Table 8-5 indicates that a respondent's level of tension increases directly as a function of his supervisory responsibility. A similar positive association is shown between supervisory responsibility and experienced job worries. The figures in the second column of Table 8-5 present the percentages of respondents who cited one or more worries in reply to the question: "Some people have problems at work that cause them very little worry, while others have the kind of problems that worry them a good deal. What are the problems in your work that tend to worry you most often?"

* Data are presented for respondents in the national survey only; all respondents in the intensive study were supervisors.

Some Intervening Variables: Intensive Study

Like occupational status, organizational rank as measured in the intensive study is positively and significantly related to tension. Table 8-6, which presents this relationship, indicates also that the biggest increment in tension is encountered as one rises from the second level of supervision to middle management. Nearly all the top management men in the sample fall into the high-tension group. The relationship between organizational rank and the index of role conflict, a measure substantially associated with tension scores (Chapter 4), is not similarly monotonic. Role conflict increases as one goes up the organizational ladder, reaches its apogee at middle management levels, and falls again at the top management level.

What characteristics of high-status jobs are likely to account for the association between rank and tension? Three obvious job char-

Table 8-6 Factors Associated with Organizational Rank (from the intensive study)

	<i>Second Level Foremen</i>	<i>Middle Manage- ment Supervisors</i>	<i>Top Manage- ment</i>	
Percentage of cases above median on role conflict index	18	60	90	54
Percentage of cases above median on tension index	22	31	71	91
Percentage of cases above median on three job characteristic indices:				
Importance of organizational boundary contacts	11	19	71	91
Importance of departmental boundary contacts	22	38	47	64
Innovative demands	33	38	53	82
Percentage of cases coded as:				
Status-achievement oriented	38	57	71	44
Expertise-achievement oriented	42	46	62	33
<i>N</i>	(9)	(16)	(17)	(11)

acteristics to be examined are those already observed to be stressful (Chapters 6 and 7): importance of organizational boundary contacts, importance of departmental boundary contacts, and innovative demands. Table 8-6 indicates that all three of these attributes are particularly characteristic of jobs high in organizational status.

The stressfulness of boundaries and innovative pressures helps to explain the association between rank and tension (Table 8-6). It does not suffice to explain the curvilinear association between rank and role conflict. Since people in middle management are not the most plagued by demands to cross boundaries and produce innovative solutions, why should so many of the *middle* management men (90 per cent) be under high role conflict?

Gurin and his associates explained the relationship between occupational status and the experience of job-related problems in terms of the greater ego involvement of persons in higher-ranking occupations. This heightened ego involvement, according to them, "creates the high aspiration within which problems are experienced." From this lead we might ask whether it is the high aspiration level of the men in middle management which makes them the recipients of the greatest pressure from their co-workers. The data suggest that this is indeed the case. The bottom lines of Table 8-6 present for each organizational rank the percentage of respondents coded as being dominated by two forms of the need for achievement—status-achievement needs and expertise-achievement needs; the distinction between these two aspects of achievement motivation and the manner in which they were coded will be discussed in Chapter 17. For the present it is sufficient to note that the middle management people emerge as the highest group on both these achievement variables. The curve described by the percentages for these variables in Table 8-6 resembles the curvilinear association between rank and role conflict. Both achievement curves rise as they progress from lower levels to middle management, and taper off again among the "haves"—those in the higher management echelon.

The men in middle management thus appear particularly driven from within by aspirations for high achievement and by the need for the favorable evaluations from others implied in the status-achievement variable. They are also, as we saw earlier, higher than any other status group on the index of role conflict. But is this not paradoxical? A major way in which an organization confers rewards upon its members is by granting them increases in organizational status. Why, then, should individuals whose needs are so well attuned to the organizational reward system be under the greatest pressures from co-workers to alter their behavior? The answer, which will emerge more fully in

our discussion of achievement orientations (Chapter 17), lies in the specific behaviors generated by this quest for status and in the unintended effects of these behaviors upon co-workers.

Summary

Whether one orders people in terms of their rank in the organization, as in the intensive study, or in terms of the status of their occupations, as in the national survey, it is clear that high job status brings with it a high level of tension. The greater incidence of problems of conflict and ambiguity in high-ranking jobs constitutes at least one of the reasons for this association. From the intensive study it is clear that people in high-ranking jobs are also exposed to more frequent role conflict. This relationship, however, is not completely linear, such conflict being more prevalent at the middle than at the top level of management.

The prevalence of job-related tensions at the higher-status levels is further explicable by the fact that a number of job characteristics shown to be stressful are typically present in high-ranking positions. Such positions are more likely to involve business contacts with others outside the person's company or outside his own department; they are more likely to require innovative problem solving; and they nearly always involve supervisory responsibility. The fact that role conflict is experienced at middle-management levels somewhat more frequently than at the top level is likely the result of interaction between these job demands and the intense but as yet unsatisfied mobility aspirations of middle-management men.

Individuals in high-status occupations report themselves as being in excellent health more frequently than those in occupations of lower status. This finding replicates an earlier one by Kasl and French (1962), which these authors explained by reference to the association between over-all health and self-esteem.

In general, persons in high-status jobs have higher aspirations and are more oriented toward ego satisfactions. These motivational characteristics help to explain that while there are no status-associated differences in average job satisfaction, people in high-status jobs report greater changes in satisfaction over the years. Such people are more likely either to have grown more satisfied or to have become more dissatisfied than those lower on the status ladder. It seems that intense and highly specific job aspirations may lead equally to the sweet satisfactions of success and to the bitter taste of failure.

9

Organizational Norms: Sources and Consequences

"**H**ERE IT'S LIKE THE GESTAPO . . .," says one respondent in the intensive study, as he gropes for a way of conveying the atmosphere of mutual suspicion and arbitrary rule which he feels permeates his plant. But atmosphere is an elusive notion, and he ends with a grim and hackneyed simile, describing the climate of his own organization by naming another. The conceptual difficulties of this respondent are not too different from those of professional observers who seek to describe and even to measure such concepts as organizational atmosphere and climate. And yet, vague as they are, these concepts command an immediate intuitive response. We have lived in organizations and experienced climate, even if we cannot define it to our satisfaction. Moreover, the concept of organizational climate, as its analogical name implies, sums up many of the determining conditions for what things shall grow in organizations and what things be blighted. The vocabulary of organizational variables requires this term or its equivalent.

Two additional requirements are invoked by our theoretical and methodological views: the conceptualization of climate should be within the framework of role theory, and the measurement of climate should be constructed from individual behavior, not divined by any member of the organization acting as informant. The first step toward meeting these requirements was to define organizational climate in terms of norms, norms already defined elsewhere (French and Kahn, 1962) in terms of role and related concepts. It seems unlikely that the total meaning of organizational climate can be reduced to normative terms; much of it nevertheless clearly consists of those overarching "shalts" and "shalt nots" which govern the actions, imply the sanc-

tions, and in time permeate the souls of organization members. When it is said, for example, that in a certain company everyone is expected to be at his desk when the clock strikes eight, that no one would dream of taking more than 40 minutes for lunch, and that the last person to go over the head of his immediate superior was fired without hearing or appeal, much of the climate of that company has been described.

The conceptual relationship of norm to role begins with the fact that they are defined in the same terms. As with role, the content of a norm consists of expectations (prescriptions and proscriptions) held by certain people and applied (sent) to certain people. A norm becomes more than a potentiality only when these expectations are sent, that is, when pressures are exerted by certain people to influence the behavior of others toward conformity with the normative expectations. All this could as well be said of a role as a norm. The conceptual difference between them lies in the range of positions or persons to which the concept applies, and the implied consensus among the senders. An organizational norm applies to all members of the organization (or to some definable subset), whereas a role applies only to the occupant of a specific office. Moreover, a norm consists of expectations held in common and usually shared by all (or nearly all) members; the expectations for a role may be held by only a single role sender. In effect, norm becomes a special instance or variant of the role concept.

In the fullest sense an organizational norm is held by every member of the organization and applies to every member. For example, all members of a voluntary organization may feel that everyone should attend meetings. To the extent that this is common (believed by all) and shared (sent by all), there is an organizational norm about being punctual. To the extent that such common-ness and shared-ness are not attained, there is less normativeness regarding attendance. At what point the word norm should no longer be applied is a matter of arbitrary decision.

Our measurement of normative expectations in the intensive study differed from that of role expectations in several respects. First, much of the material on role expectations was built upon questions to role senders dealing with the specific activities of the focal person's position (e.g., "Do you want Mr. X to spend more or less time on preparing manpower estimates?"). The normative material to follow deals, on the other hand, with behaviors applicable to persons in *all* positions in our sample; * questions pertaining to these norms were general, not

* About half of the normative questions dealt with expectations concerning supervisory behavior and are not universally applicable to the working population at large. They are nonetheless applicable to all 53 focal persons in the intensive study, all of whom had some supervisory responsibility.

role-specific. Second, the expectations summarized in the index of role conflict were measured in terms of the amount of change from his present behavior which role senders expected of the focal person. Measures of normative expectations, on the other hand, were obtained without reference to the present actual behavior of the focal person; role senders indicated things which should or should not be done, irrespective of what he was in fact doing.

The raw materials for the analysis of normative expectations were the responses of role senders to 36 items describing behaviors which could be engaged in by any of the occupants of focal roles. Several principles were employed in the selection of these items: applicability to all focal positions; inclusion of a wide range of organizational behavior; and inclusion of behaviors sufficiently controversial that there might be considerable variation among role senders as to what they ideally expected. We were particularly interested in normative behavior short of unanimous endorsement or condemnation. (The 36 items selected by these criteria are listed in Appendix E.)

For all role expectations measured in the present study, two research questions are asked: Which role senders are most likely to hold these expectations? What are the consequences of these expectations for the work-role adjustment of the focal person? A comparable pair of questions was asked with respect to each normative expectation. But a problem occurs in the analysis of normative expectations which did not arise in our earlier investigation of role pressures. It was possible to regard the sent pressures in the index of role conflict as possessing an important communality and direction; they all were pressures away from the present behavior of the focal person. For the 36 normative items such a priori communalities were lacking. Indeed, the 36 normative items were chosen not for similarity but to represent a considerable range of normative issues. In view of this, it was necessary to reduce this array of 36 items to a more manageable number of homogeneous item clusters.

The Dimensions of Normative Expectations

What are the basic dimensions which define the normative expectations of role senders? This question seems almost classical in its demand for a factor analytic answer. Accordingly, the following pages report the results of a factor analysis which took as its raw material the responses of the 381 role senders indicating the degree to which

they advocated compliance or noncompliance with the behaviors described by each of the 36 normative items.

The intercorrelations among the responses of role senders to these items were subjected to a factor analysis by the principal axes method. Seven factors thus obtained were blindly rotated by the Varimax method (Kaiser, 1958). These seven orthogonally rotated factors accounted for 99 per cent of the common factor variances. (A complete description of the factor loadings of all 36 items is presented in Appendix F.)

Subsequent analyses of organizational norms were based on factor scores representing each role sender's expectations on the several items best representing each factor. In selecting items to represent each factor, the six items loading highest were chosen, providing their factor loadings exceeded 0.20.* Subsequent analyses were restricted to the first five of the seven factors, since it was these to which meaningful, independent interpretations could be assigned. The following pages provide for each of these five factors a substantive identification of the factor, a list of the items finally chosen to represent it, and the loading of each of these items on the particular factor.

Factor I: Rules Orientation

A high score on this factor indicates that the role sender is strongly *rules oriented*; more specifically he holds the following expectations for the focal person:

DO stick to the letter of company rules. (.70)

DO accept judgments of higher-ups as final. (.42)

DON'T spend time off the job with others who have a much higher position than his. (.39)

DON'T bypass official channels when he wants something done in a hurry. (.39)

DON'T take an occasional day off just to relax. (.37)

DON'T break company rules when he thinks it's in the company's best interest. (.34)

The positive end of this factor describes company-oriented expectations which require following the organizational rule book to the letter. These rules-oriented expectations are not merely general, as suggested by the first two items; they are to be applied even when such rules-oriented behavior might damage the company itself. High-scor-

* The item "Spend most of his time in supervisory matters" was not included in the computation of factor scores since it seemed too closely tied to the specific activities of certain focal positions.

ing role senders expect a person to stick to the rule book even if this behavior slows his work or is contrary to his perception of the company's best interest.

Loadings of the third and fifth items ("should not spend time off the job with higher-ups" and "should not take an occasional day off just to relax"), though not by themselves suggestive of rules orientation, are consistent with this interpretation. Since company rules imply that people should always be on the job at the appointed times and not be absent for "selfish" purposes, it is reasonable that absence for purposes of relaxation should be proscribed by rules-oriented role senders.

An item about spending time off the job with people in lower positions loads on this factor in the same direction as does the item about spending time with those in higher positions. This similarity in loading suggests that the proscription against "spending time with higher-ups" does not here reflect a dislike for currying favor (as it does in Factor V). Rather, it represents a tendency to proscribe informal contacts with all persons to whom one stands in a relation of superordination or subordination. Such contacts might tend to weaken the impersonality required for a truly rules-oriented administration.

Factor II: Nurturance of Subordinates

The role prescriptions included in this factor are:

DO train men under him for better jobs. (.61)

DO take a personal interest in his men. (.58)

DO be responsible for keeping up the morale of those under him. (.58)

DO keep men informed on what is happening in the company. (.44)

DO accept full responsibility for decisions of those under him. (.42)

DO consult with his men on any decisions that affect them. (.37)

Factor III: Closeness of Supervision

Role senders scoring high on this factor endorse the following statements for the focal person:

DON'T let those he supervises set their own work pace. (.68)

DON'T allow his men a great deal to say about the way they do their work. (.60)

DON'T leave the men he supervises alone unless they want help. (.50)

DO report others who break company rules. (.42)

DON'T take sides with his men in any dispute with the company. (.39)

DO check frequently on the work of his men. (.38)

The items on Factors II and III are particularly significant in that they do not represent the single dimension of supervisory supportiveness which has been so often assumed in the literature of human relations. They array themselves instead on two orthogonal factors. Factor II concerns itself with demands that a supervisor have at heart the best interests of those working for him and that he be solicitous in his dealing with these subordinates. The items subsumed under Factor III, also relevant to supervisory behavior, are more directly involved with the actual performance of subordinates as entered into by the supervisor. Most of the items in Factor III prescribe what would ordinarily be designated as close or strict supervision.

The emergence of two such independent factors as these supports the view that supervisory behavior cannot be described on a single continuum ranging from employee-centered to job-centered styles. Factors II and III are more compatible with the two-dimensional description of leadership in terms of consideration and initiating structure (Hemphill and Westie, 1950; Stogdill *et al.*, 1955).

The plausibility of nurturance and closeness as independent aspects of supervision is enhanced when they are considered in combination. Such a combination in its simplest form is presented in Table 9-1. Intuitive recognition of the types implied by the four cells of that table comes quickly, and the designations seem natural and obvious. The pattern of protective surveillance (close supervision-high nurturance) represents the essence of paternalism, as the combination of freedom without nurturance represents the uncaring policy which is literally *laissez-faire*. The merger of close supervision with low nurturance typifies the "production hound" supervisor described by many a disgrun-

Table 9-1 Four Supervisory Styles Defined by the Conjunction of Nurturance of Subordinates and Closeness of Supervision Factors

<i>Closeness of Supervision</i>	<i>Nurturance of Subordinates</i>	
	<i>High</i>	<i>Low</i>
Close	Paternalism	Job-centered supervision
General	Employee-centered supervision	Indifferent, impersonal, laissez-faire

tled employee, whereas the generally supervising, highly nurturant style comes closest to the pattern of supervisory success as reported in the literature of organizational behavior.

Factor IV: Universalism

Factor IV is named after the dimension of universalism-particularism, which plays so prominent a part in Parsons' treatment of social systems and social values. Its component items are as follows:

DON'T withhold information from higher-ups which puts a co-worker in a bad light. (.62).

DON'T try to cover up errors made by those under him. (.53)

DON'T do favors for friends contrary to company rules. (.43)

DO report others who break company rules. (.30)

DON'T give special attention to friends in making recommendations for promotion. (.27)

DON'T defend his co-workers from criticism by their superiors. (.25)

Parsons and Shils describe the universalistic-particularistic dimension as follows:

(1) Universalism: the role-expectation that, in qualifications for memberships and decisions for differential treatment, priority will be given to standards defined in completely generalized terms, independent of the particular relationship of the actor's own statuses to those of the object.

(2) Particularism: the role-expectation that, in qualifications for membership and decisions for differential treatment, priority will be given to standards which assert the primacy of the values attached to objects by their particular relations to the actor's properties as over against their general universally applicable class properties (1954, p. 82).

The two extremes of Factor IV appear to represent in concrete terms the universalistic-particularistic dichotomy thus described by Parsons and Shils. This factor embodies a demand that the focal person disregard his primary relationships with his work associates, such as friendship or membership in the same subgroup, in favor of loyalty to the social system as a whole, embodied here by "the company." Each person is to be guided in his dealings with others only by those universalistic values which pertain to the company good, relinquishing any acknowledgment of affective bonds and personal needs, and avoiding any other displays of particularistic favoritism toward co-workers.

Factor V: Promotion-Achievement Orientation

Role senders scoring high on this factor expect the following of the focal person:

DO take advantage of every opportunity for promotion. (.61)

DO try to make himself look good in the eyes of higher-ups whenever possible. (.44)

DO spend time off the job with others who have a much higher position than his. (.28)

DO train men under him for better jobs. (.26)

DO come up with new, original ideas for handling work. (.22)

Factor V epitomizes the aspiration for moving upward in the hierarchy, and reflects a good deal of tolerance with respect to the means of attaining such mobility. Not only should the focal person earn promotion through his performance on the job (train men under him, come up with new ideas); he is also expected to strive for promotion by showing a certain expertise in public relations (look good to higher-ups whenever possible) and by making the most of informal channels to those who have influence (spend time off the job with people in much higher positions). One should feel that the goal is clear and that other considerations are secondary.

From the information provided by this factor analysis, each respondent was assigned a score indicating his position on the several items used to identify each factor. In obtaining these factor scores, raw item scores were first standardized, giving all items equal means and standard deviations, and each of these standardized scores was then weighted by its squared factor loading. The score of each respondent on a particular factor consists of his weighted, standardized item scores, summed over the several items identifying the factor.

Attributes and Normative Expectations

The normative expectations of one person for another originate in the fact of their common organizational membership, but can be thought of as modified by various additional factors. One of these additions is the idiosyncratic state of the person (norm sender); he is a particular individual who occupies a particular position in the organization. Another modifier of normative expectations is the role relationship between the person (norm sender) and the individual for whom he holds normative expectations (norm receiver or focal person).

For example, consider an organization in which the norm requires

rather strict adherence to rules; that is, most people in the organization think it important that members should follow the rules, and these expectations are communicated widely. Nevertheless we might select two members of the organization at random and find one much more rules oriented than the other, a contrast reflecting differences in personality, position, or both. We might find also that these people did not apply their normative expectations in an unvarying fashion to all members of the organization. They might feel (as many members do) that it is important for their subordinates to be strictly rules oriented, but that it is desirable for their superiors to be less so.

In Part IV we will examine in detail some of the role relations which lead people to modify their normative expectations for certain focal persons. In this chapter we are concerned with factors which account for persistent deviations in the normative expectations of an individual from the organizational mean—enduring characteristics of the person himself or of his organizational position.

Four characteristics of members are utilized in this analysis:

Tenure—the length of time the person has been a member of the organization.

Rank—the relative position of the person in the company hierarchy. The procedure for assigning a rank code to each position was straightforward for focal persons but rather involved for others. Each focal person was assigned a rank code based on the number of echelons between his own position and that of nonsupervisory (hourly rated) workers. The resulting code was adjusted to take account of differences between companies in the total number of echelons. For positions other than those of focal persons, rank was estimated on the basis of salary comparisons with focal persons in the same company.

Supervisory responsibility—a dichotomous determination of whether or not each position involves supervisory activities.

Blue-collar or white-collar position.

The associations between these four characteristics of members and their scores on the five factors of normative expectation are summarized in Table 9-2. Each entry in this table indicates a significant relationship at the 0.05 level or beyond, based on the over-all *F*-test of mean expectation differences as a function of the characteristic under consideration. The caption in each cell indicates the direction of the relationship between the normative factor and the characteristic of the role sender, that is, which level of the characteristic under consideration implies the higher score on the particular normative factor.

Occupying a position with supervisory responsibility (Table 9-2,

Table 9-2 Summary Table of Associations between Characteristics of Norm Senders and the Normative Expectations of these Senders (from the intensive study)

<i>Character- istics of Role Senders</i>	<i>Normative Factor</i>				
	<i>I Rules Orientation</i>	<i>II Nurturance of Subordinates</i>	<i>III Closeness of Supervision</i>	<i>IV Universalism</i>	<i>V Promotion/ Achievement Orientation</i>
Tenure	High tenure	Moderate tenure	High tenure		High tenure
Rank	Low rank	High rank	Low rank		
Blue-collar/ White-collar	Blue- collar	White- collar	Blue- collar		
Supervisory/ non-super- visory	Supervisory responsi- bility	Supervisory responsi- bility	Supervisory responsi- bility	Supervisory responsi- bility	Supervisory responsi- bility

line 4) disposes a person to take an extreme position on all five normative factors. Compared to people who are not supervisors, those who hold supervisory jobs expect focal persons to be universalistically oriented (Factor V) and oriented toward company rules (Factor I). They expect a focal person to exercise close supervision (Factor III) and at the same time to take a close personal interest in his men (Factor II), a composite pattern identified earlier as paternalistic. The personal interest which focal persons are expected to take has its limits, however. Where rules-oriented and personal considerations are in conflict, as they are in the hypothetical situations on which Factor IV (universalism versus particularism) is based, people with supervisory responsibility demand more than others that such conflicts be resolved in favor of adherence to impersonal rules.

Within our sample of supervisory people can be distinguished two subgroups who hold somewhat contrasting orientations in what they feel is appropriate supervisory behavior. On one hand is the supervisor in a low-status, blue-collar job who has been with his present company for a long period of time. He is characterized by high scores on both the rules orientation and closeness of supervision factors. This low-status, long-tenure, blue-collar supervisor believes that a good organizational man does not deviate from the rules or from the demands

of his superiors, even when he feels that breaking rules or bypassing official channels is in the company's best interests. He also believes that a supervisor should grant a minimum of freedom to his men with respect to the manner or pace at which they work. A supervisor should put the interests of the company above those of his men at all times, reporting those who break company rules and not taking sides with his men in disputes with the company.

A contrasting orientation is held by a second group of supervisors whose own situation in the company is very different from that just described. This second group consists of supervisors who have only moderate company tenure and hold high-status, white-collar jobs. They think a supervisor should be nurturant toward his subordinates; like other high-status white-collar people, they are low on both rules orientation and closeness of supervision demands. They believe a supervisor ought to take a personal interest in his men and ought to groom them for better jobs. He also should provide his men with information as to what is happening elsewhere in the company and should incorporate information provided by his subordinates into his own decision making.

As we have seen, Table 9-2 can be used in a number of ways. One may choose a particular normative expectation, and ask whether there are certain characteristics which dispose members of the organization to positions of extreme endorsement or rejection of it. Read across rather than down, the table answers such questions as which normative expectations are most typical of blue-collar workers (i.e., high rules orientation, low nurturance of subordinates, high closeness of supervision) or which normative views are especially characteristic of people with long tenure in the company (i.e., high rules orientation, high closeness of supervision, high promotion-achievement orientation). However one chooses to look at and interpret Table 9-2, the mere fact of entries in the cells makes a point worth reiterating: the normative expectations which a person holds for others in the organization are partly explicable in terms of certain fixed characteristics of the person's own organizational position. There is by definition considerable uniformity of normative expectations within an organization, but the deviations from that agreement are significant and systematic.

Role Stress and the Normative Milieu

This chapter began with an attempt to define in commensurate terms three organizational concepts: climate, norm, and role. We found their

communality in the concept of expectations and the transmission of expectations. Thus, a norm consists ideally of expectations which are systemwide and apply to all persons; a role consists of expectations which apply only to a certain position (or a homogeneous class of positions). A complementary distinction between norm and role involves the senders rather than the receivers of expectations. Normative expectations may be thought of as tending to be held by all members of a given organizational system, in contrast to role expectations, which are held by some subset of people defined as role senders primarily by the structures of work-flow and formal authority. The system-permeating expectations of norms constitute, in combination, the climate of the organization. As we have seen, however, the consensus of members with respect to norms is less than complete and is mediated by the characteristics of the norm senders themselves.

The definition of norms in systemic terms requires that we encounter normative differences as we cross system boundaries, and leads us to suspect that we might also discover normative differences as we cross the boundaries of subsystems. The normative approach to organizational climate can even be reduced to microorganizational terms, and can lead us to explore the frequency of normative differences among role sets. To the extent that such differences exist, they suggest that each role set (focal person and role senders) produces its own local variations on the general organizational climate. Normative analysis at the level of role sets also permits us to examine the effects of local climatic variations on focal persons.

For analysis at this level, a score was assigned to each role set on each of the five normative factors: rules orientation, nurturance, closeness of supervision, universalism-particularism, and achievement orientation. These scores were based directly on the mean for all role senders in a given set. We could then consider the relationship between the normative characteristics of sets and the apparent effects of these characteristics on the focal person.

Table 9-3 indicates that role conflict is greatest where the prevailing expectations in a role set emphasize low rules orientation, low closeness of supervision, and low universalism—that is, in groups which deviate from the general organizational norms in the direction of permissiveness, autonomy, and a willingness to deal with people in individualized, personal terms. Moreover, the tension scores of focal persons are significantly higher in role sets which deprecate orientation to rules and closeness of supervision ($p < 0.10$ and $p < 0.001$, respectively).

These findings admit of several interpretations. They could be taken

Table 9-3 Percentage of Clusters Characterized by High Role Conflict in Relation to Prevailing Expectations on Three Normative Factors (from the intensive study, N = 53)

<i>Clusters Characterized</i>	<i>Cases Under High Role Conflict (%)</i>	<i>p</i> ¹
High rules orientation	35	
Low rules orientation	63	<0.05
High closeness of supervision	30	
Low closeness of supervision	67	<0.01
High universalism	37	
Low universalism	65	<0.05

¹ The *p*-values are based on 2 × 2 chi-square values.

as an argument in favor of strict bureaucratic style as less conflictful and ultimately more tension free; however, this interpretation is difficult to reconcile with the bulk of social psychological studies of organization. It is possible also to interpret the relationships primarily in terms of consistency of expression by members of each role set. For example, people who believe strongly in adhering to organizational rules do not believe in creating conflict for their supervisors.

There is, however, a third interpretation worthy of consideration. It asserts simply that a person is subjected to greater role conflict and experiences greater tension when the expectations of his role senders are basically antiorganizational. For example, his subordinates think he *should not* accept organizational rules or orders from above as absolutes, but should break rules and bypass official channels when he deems it just or necessary. His closest co-workers thus hold normative expectations for him which deviate from the bureaucratic principles that constitute the backbone of most industrial organizations. The focal person must either reassert the more bureaucratic organizational norms and repudiate his already mutinous crew, or join them in navigating an alien bureaucratic sea.

Under such circumstances it would not be surprising to find that focal persons in such role sets are often in difficulty with people outside the set. The conflict of old guard versus new (Chapter 7) typifies such a situation. Persons in innovative roles were earlier shown to be subjected to demands for a degree of creative and innovative behavior

incompatible with more general organizational rules. In addition, members of the role sets of these persons were found to have lower scores than others on the rules orientation factor. Such expectations may, however, frequently be opposed by people less concerned with innovation than with maintenance of the status quo. But the pressures on focal persons in normatively permissive role sets are not wholly from outside these role sets. The positive association between permissive norms and the index of role conflict indicates that the very people who believe in permissive antibureaucratic behavior are themselves senders of high pressure to the focal person.

The expectational milieu which in a sense grants to a focal person the greatest freedom also creates for him the greatest stress. Two characteristics of this freedom might serve to make this situation a stressful one. First, with increased freedom comes greater personal responsibility for one's decisions. Second, freedom of choice means the freedom to make wrong decisions as well as creatively right ones. Aberrations from prescribed performance may be less tolerated in a restrictive organizational environment than in a permissive one; in the more restrictive environment a person must step back into line or be fired. Where the norms within the role set are those of leniency, tolerance, and nurturance, the organizational devices which bring the deviant back into line are more remote and slower to operate, but perhaps no less sure.

Summary

Norms have much in common with role expectations; they define the rules by which all members of an organization expect each other to abide. When such rules are violated by any individual, his role senders attempt to correct his behavior. Thus norms form an important part of the individual's social environment.

Factor analysis of a 36-item questionnaire included in the interview with role senders in the intensive study indicated that their normative orientations can be described along five dimensions. These are concerned with the focal person's behavior with respect to the rules of the organization, supervision, subordinates, other members of the organization in general, and with respect to his own performance goals. Although the emphasis in this chapter has been upon the differences of opinion that exist among role senders, their average positions along these five dimensions reveal also the beliefs that they hold in common.

As a group, respondents in the intensive study believe that a member of their respective organizations should abide by the following rules:

1. He should obey the rules of his organization and follow orders.
2. If he is a supervisor, he should nurture his subordinates to some extent, taking a personal interest in their welfare.
3. He should supervise his subordinates neither too closely nor too loosely.
4. He should treat other members of the organization according to generally acceptable standards (universalistically), rather than according to their individual relationship to him (particularistically).
5. He should strive strenuously for high achievement and advancement in the organization.

In the main this catalogue of basic beliefs agrees quite well with the description of organizational culture offered by other investigators. It emphasizes the two characteristic requirements of bureaucratic behavior: obedience to rules and a universalistic orientation toward the occupants of other offices in the organization. The prescription of a happy medium between close and general supervision, as well as a nurturant attitude toward subordinates, is consistent with the general shift toward a style of supervision more concerned with human relations. Finally, our respondents affirmed continuing support for achievement-oriented values in the world of work.

Although there is broad agreement on these propositions, significant deviations occur within the ranks of the organization. Interpretations of the five norms outlined above are found to differ somewhat according to the rank, tenure, occupational status, and supervisory status of the respondents. This variation in degree of acceptance makes it possible to differentiate among the various role sets according to their own normative climate. Most significant for problems of conflict and ambiguity is a climate that prescribes extreme leniency, tolerance, and nurturance. Although such a permissive milieu permits the focal person a great deal of freedom, it also burdens him with greater responsibility for his decisions, exposes him to attempts at correction from outside his immediate work group, and presents him with the problem of trying to live successfully in two organizational worlds. In short, an unusually tolerant and nurturant local climate in a less benign organization sets for the focal person a tender trap.

PART FOUR

Interpersonal Relations in Role Stress

A distinction is made on the operatic stage between a chorus and an ensemble. Members of a chorus are undifferentiated; they see the central character with a single pair of eyes and praise or denounce him with a single voice. The characters in an ensemble, although often as numerous as those in a chorus, constitute a more differentiated group, each with his particular role relationship to the central character. The demands made by each on the central character are peculiarly colored by the interpersonal history of the pair.

Of these two models, the chorus is more convenient but the ensemble more appropriate to the study of role conflict in formal organizations. Only when a person flagrantly violates an important and generally held organizational norm does the choral model obtain in organizations; only then do all role senders speak in a single voice against the violator's behavior. More commonly, a person's role senders—each also the occupant of an organizational office, each subjected to a unique

set of role expectations, and each bearing a unique relationship to the focal person—differ among themselves as to what they expect of the focal person.

As a result the focal person is not bombarded with role expectations of the same content and in the same way from all potential sources in his role set. A full understanding of the role-sending process cannot be obtained merely from the content of the role expectations, nor even from the separate consideration of characteristics of role senders and focal persons. One must consider also the unique relation of each role sender to the focal person.

In Chapters 10, 11, and 12 we attempt to take account of these relations, as they bear on problems of role conflict and ambiguity. Three sets of variables are involved in the analysis: (1) *formal role relations*—those relations between persons which are established by virtue of their positions in the formally prescribed structure of the organization; (2) *informal interpersonal bonds*—patterns of cognitive and affective orientation between persons; and (3) *interaction processes*—those recurrent patterns of behavior of one person toward another which presumably emerge out of formal relations and informal bonds.

10

Role Relations in Formal Organizations

Formal Organizational Structure and Varieties of Role Relations

Every organization is faced with two basic problems. The first problem is to divide the activities of the organization into subsets, each subset being of such a size and nature that it can be performed by a single person. But this organizational division of labor creates a second problem—that of coordinating and controlling these activities with respect to the organization's goals. Out of the attempt to solve such problems of differentiation and integration develop the structure and substructures of organization and the formal relationships among roles.

Each member of the organization can be viewed as occupying a designated position in the structure created by the division of labor, as performing the functions assigned to that position, and as interacting with members in certain other positions in ways designed to insure the additivity of their work. The relative positions of any two persons within this total structure determine to a considerable degree the relations which will obtain between them. Viewed in this way, role relations in an organization, though interpersonal in the broad sense of the term, are largely *depersonalized*; our emphasis in the present chapter is on those aspects of the relations between people which are shaped primarily by the formal structures of organization. Positional, rather than personal, attributes become the principal units of analysis.

Three such role relations—basic to organizations in that they arise directly from the processes of differentiation and control—are identified. The first, *functional dependence*, reflects the fact that while dif-

ferent activities may be allotted to different positions, these activities are nevertheless interrelated and interdependent in the creation of a common organizational product. The second relationship, *organizational proximity*, is based upon the fact that a formal organization is made up of subunits, each consisting characteristically of a supervisor and a group of subordinates engaged in a set of activities which are functionally related to each other more closely than to the activities of other subunits. Proximity has to do with organizational rather than geographical space and is measured in terms of the number of boundaries interposed between two positions. The third relation, *status-authority*, constitutes the organizational solution to the problems of coordination and control.

Functional Dependence

To the extent that the organizational division of labor creates pairs of positions for which adequate activity performance of one position is requisite to the adequate performance of the second, these positions may be said to be functionally interdependent. In the intensive study, the selection of role senders to be interviewed in each cluster was determined in part by the focal person's nominations of persons whose job performance most affected his own. There was nevertheless some variability in the extent to which the focal person depended on different members of the role set. Moreover, dependence is not necessarily symmetrical, and there was somewhat greater variation among role senders in the extent to which they depended on the focal person.

To measure the functional dependence of each role sender on the focal person, role senders were presented with a list of the major activities of the focal position and asked, concerning each activity: "From the standpoint of how it affects your *own* job, how much does it concern *you* that this gets done properly?" The functional dependence of a role sender on a focal person was determined by the percentage of the latter's activities which the role sender indicated on a four-point, fixed-alternative scale concerned him at least "somewhat."

Proximity

The division of labor in an organization results not only in the differentiation of positions according to the activities assigned to them and the integration of these positions according to the principle of functional dependence. This division also involves the grouping of positions into similarly oriented subunits which constitute organizational

work groups, sections, departments, and divisions. Such grouping of organizational positions into distinct departments separated by boundaries of function and authority was shown (Chapter 6) to be an important source of role conflict. We expected that the concept of intra-organizational boundary would also be useful in the analysis of formal relations between roles. Accordingly, each pair (focal person and role sender) in the intensive study was characterized according to their organizational proximity (the number and character of the intraorganizational boundaries interposed between the two positions). Five degrees of organizational proximity were distinguished:

Role sender and focal person are in the same work section, the smallest recognized work-group (including role senders who are the focal person's immediate supervisors or subordinates).

Role sender and focal person are in related work sections of the same department (including role senders who are two levels above or below focal person in direct line of authority).

Role sender and focal person are in the same department but their work sections are otherwise unrelated (including role senders who are more than two levels above or below focal person in direct line of authority).

Role sender is in a different department from focal person but acts as a major liaison between the two departments.

Role sender is in a different department from focal person and does not act as a liaison between the two departments.

Since the organizational delineation of work sections and departments is based on the degree of integration of the activities subsumed under these units, functional dependence and proximity should be positively correlated. In the present data, the measures of these two variables correlate .30 ($p < 0.01$). This correlation, though statistically significant, is consistent with our treatment of functional dependence and proximity as separate interpersonal variables. Some indication of the qualities which differentiate these two variables may be obtained from their correlations with the amount of communication between focal person and role sender. Functional dependence correlates .35 with this communication as estimated by the focal person, and .34 with this communication as estimated by the role sender. Correlations between proximity and these same two communication variables are somewhat higher, .52 and .46, respectively. These correlational differences suggest that the proximity variable, though defined in terms of organizational rather than physical space, may also imply physical closeness. The organizationally close role sender and focal person may be more likely than the functionally dependent pair to share a common office, or

get in on the same stop of the coffee cart. They are likely to have considerable opportunity for informal communication. On the other hand, the functionally dependent pair, for example, foreman and time-study engineer, are more likely to communicate mainly when it is necessary to the performance of their jobs. The coincidence of physical and organizational proximity also implies that a role sender who is organizationally distant from the focal person will be unfavorably situated for observing his behavior—a circumstance that peculiarly shapes his role expectations for the focal person.

Status and Authority

The formal control structures of organizations are conventionally represented in organization charts. In such charts each office or position is drawn as a box directly below the office by which its activities are to be supervised and coordinated, and a line connects the two boxes as a symbol of the bond of formal authority. Looked at somewhat differently, however, a formal organizational chart may be viewed as defining *two* sets of interpersonal relations—relative status and formal authority. Both are illustrated in Fig. 10-1, which can be viewed as a

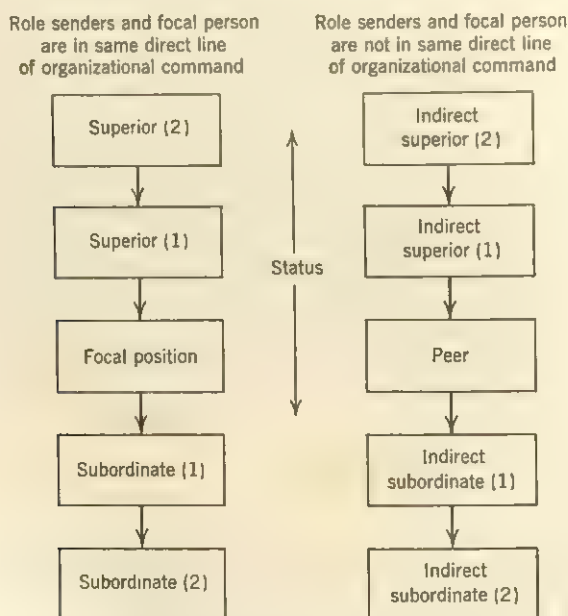


Figure 10-1. Nine positions of status and authority in relation to a focal position.

portion of a prototypical organization chart. The left-hand column represents four positions of status and authority, relative to the focal position.

Superior (2)—Role sender is two or more levels above focal person in a direct line of command (i.e., role sender is the direct superior of focal person's direct superior).

Superior (1)—Role sender is direct superior of focal person.

Subordinate (1)—Role sender is direct subordinate of focal person.

Subordinate (2)—Role sender is two or more levels below focal person in a direct line of command (i.e., role sender is a direct subordinate of one of focal person's direct subordinates).

For these four positions in a direct line of command with the focal position, relative status and formal authority relations are identical; to be "above" a person in status also implies that one has formal authority over him.

The right-hand column of Fig. 10-1 represents five other positions which might, for instance, be in a department adjacent to that of the focal person. These positions are alike in that there are no bonds of formal authority linking them directly to the focal position; but these five positions may nonetheless be differentiated in terms of their relative status, in a manner analogous to that applied to the direct-line-of command groups:

Indirect superior (2)—Role sender's organizational status is comparable to that of Superior (2) above, but he has no direct authority over the focal person.

Indirect superior (1)—Role sender's organizational status is comparable to that of Superior (1) above, but he has no direct authority over the focal person.

Peer—Role sender and focal person have the same organizational status.

Indirect subordinate (1)—Role sender's organizational status is comparable to that of Subordinate (1) above, but the focal person has no direct authority over him.

Indirect subordinate (2)—Role sender's organizational status is comparable to that of Subordinate (2) above, but the focal person has no direct authority over him.

Use of this scheme for showing relative status and formal authority not only permits us to describe meaningfully the relations between any pair of positions on an organizational chart, but also enables us to control relative status while exploring the concomitants of formal authority, and vice versa.

Sent Pressure and Role Relations

The application of the ensemble model to the analysis of role stress suggests that a stressful role is not created in undifferentiated fashion by all role senders. On the contrary, we would expect differentially stressful role expectations to emanate from senders who bear different formal relationships to the focal person. Three such relationships have just been proposed: functional dependence, organizational proximity, and relative status. We now consider three specific kinds of expectations which role senders can hold for the focal office, and ask for each whether it is likely to originate with role senders who bear certain formal relations of functional dependence, proximity, and status to the focal person. Sent pressure reflects the first of these kinds of expectations.

The index of role conflict used in the intensive study is an average of the pressures away from the status quo sent to the focal person by his role senders. For the present relational analysis of role expectations, the unaveraged index of sent pressure (Appendix C) is a more appropriate measure, since it indicates the degree to which each role sender pressures a particular focal person to alter his behavior. Tables 10-1 through 10-3 show the positions from which focal persons tend to receive a high degree of pressure toward change. These tables yield three general conclusions:

1. The amount of pressure sent by a role sender to a focal person is a direct function of their organizational proximity.

Within a given role set, the focal person receives greater pressure toward change in behavior from role senders in his department than from those outside it (Table 10-1). The role senders who put least pressure on the focal person are outside his department but in the role of liaison between their own department and his. The latter difference is quite germane to the problem of boundary stress, discussed in Chapter 6. Although a boundary position was shown to be stressful for the occupant, it does not follow that the greatest pressure will be sent to him from role senders beyond this boundary. Only if the focal person accedes wholly to the expectations of role senders within his own department will this be the case. Credit Expediter, whose case will be discussed in Chapter 18, generally resolves his boundary conflicts in favor of a department *not* his own; here role senders in his own department are virtually the only source of complaints. That

Table 10-1 Mean Sent Pressure in Relation to Organizational Proximity (from the intensive study)

<i>Proximity of Focal Person and Role Sender</i>	<i>Mean Sent Pressure</i> ¹	<i>N</i>
Person and sender are in the same department	51	(291)
Person and sender are in different departments	48	(90)

¹ The *t*-test of difference between means is significant at $p < 0.01$.

a liaison group should place least pressure on the focal person adds weight to a point made in Chapter 6—that a liaison person, lacking formal authority over those outside his department, must rely heavily on the friendship these outsiders have for him. Since it has already been shown (Chapter 4) that sent pressure and its resultant conflict weaken affective bonds, a role sender with liaison responsibilities would be reluctant to pressure the focal person to any great extent. To do so would eliminate one of his principal sources of influence over the focal person. The low pressure behavior of the liaison person may be, moreover, symptomatic of the conflicts of the liaison role. His department may demand that he pressure the focal person; but such pressure, while perhaps temporarily effective, would lessen his chances of exerting influence successfully in the future.

2. The association between sent pressure and the functional dependence of the role sender on the focal person tends to be curvilinear, with the greatest pressure coming from those who are only moderately dependent on the focal person (Table 10-2).

Two properties of functional dependence working in opposite directions are likely to have generated this curvilinearity. First, since a role sender would be little inclined to pay much attention to the focal position unless it affects his own job, we would expect a positive association between functional dependence and sent pressure. Second, excessive pressure on the focal person is likely to provoke him to avoidance or withdrawal of cooperation, either of which would be potentially disastrous for a role sender who is highly dependent on him. Lest the highly dependent role sender suffer the consequences of biting the hand that feeds him, he must exercise more caution than

others in the amount of pressure he exerts. His situation, like that of the liaison person, is somewhat touchy. The interaction of these two aspects of functional dependence would generate a curvilinear relationship between functional dependence and sent pressure such as that found in Table 10-2. A role sender whose functional dependence on the focal person is moderate acts in close enough conjunction with him to care what he does, but not closely enough to be overcautious about exerting pressure on him.

3. A focal person receives the greatest amount of pressure from his direct superiors, the least amount from his peers (Table 10-3).

Among the superior role senders in the same chain of command as the focal person, sent pressure does not increase with status. On the contrary, the immediate supervisor [direct superior (1)] sends more pressure than does the supervisor's supervisor [direct superior (2)]. The direct observability of behavior may help in part to explain this difference. First-hand observation of his work renders the shortcomings of the focal person more obvious to his immediate supervisor than to those still higher in management. The latter typically receive filtered information about the performance of the focal person. Moreover, the filtering agent is the immediate supervisor, who is often inclined to withhold negative information to protect his subordinates or his own reputation for supervisory competence. Further-

Table 10-2 Mean Sent Pressure in Relation to Functional Dependence of Role Sender on the Focal Person (from the intensive study)

<i>Functional Dependence</i>	<i>Mean Sent Pressure¹</i>	<i>N</i>
High	50	(134)
	51	(46)
	53	(62)
	51	(52)
	49	(45)
Low	49	(42)

¹ The *F*-test of over-all differences among means is significant at $p < 0.05$.

*Table 10-3 Mean Sent Pressure in Relation to Relative Status and Authority*¹ (from the intensive study)

	<i>Direct</i>		<i>Indirect</i>	
	<i>Mean</i>	<i>N</i>	<i>Mean</i>	<i>N</i>
Superior (2)	51	(25)	51	(6)
Superior (1)	54	(52)	50	(23)
Peer			48	(70)
Subordinate (1)	50	(137)	50	(37)
Subordinate (2)	50	(10)	49	(12)

¹ The *F*-test of over-all differences among means is significant at $p < 0.02$.

more, organizational protocol requires that a distant superior shall not put direct pressure on an employee; he is supposed to use the employee's immediate supervisor as an intermediary. One goes down through channels, as well as up. Consequently the pressure from one's immediate supervisor [direct superior (1)] has two components: his personal expectations and the expectations which he transmits from his own superior. This intermediary function of immediate supervisors is further suggested by a comparison of direct superior (1) and direct superior (2) groups in terms of the percentage reporting that they "go through channels or some third person in exerting influence on the focal person." * Seventy-two per cent of the superiors once removed report "going through channels," and these channels might reasonably be assumed to be the immediate supervisors, only 18 per cent of whom report recourse to such third parties.

Role Relations and the Adequacy of Job Conceptions

Communication is an essential ingredient in the resolution of role conflict. Where role conflict assumes the form of role overload, an obvious early step in the lessening of this overload is for the focal person to find out from role senders how imperative from their stand-points are their demands upon his resources. If a role sender perceives that his demand of the focal person creates a major disaster for the

* For a more complete description of the manner in which this and other influence variables were measured, see Chapter 11.

focal person when the demand is met but generates only a minor delay for the role sender himself when it is not met, the role sender may willingly defer such a demand. Where inter-sender conflict is present, the effects of such conflict on the focal person may often be resolved by free interchange among role senders and the focal person, resulting in a compromise of expectations in light of the resources currently available to the focal office.

But the communication necessary to the resolution of role conflict must always be *intelligent* communication. Any role sender who considers tempering his expectations upon a particular office needs to be knowledgeable about: the contribution of the activities of his own office to the ultimate organizational output; the contribution of the activities of the focal person's office to this output; and the effects on both contributions of tempering his expectations concerning the focal person. An adequate conception of the focal office on the part of role senders is therefore a necessary but not sufficient condition for their making intelligent decisions about demands on the focal person, and for contributing to the resolution of role conflicts involving the focal office.

The adequacy of a role sender's conception of the focal office is not only pertinent to the resolution of role conflict; it is significant in the genesis of such conflict. The discussion of the stresses of boundary roles (Chapter 6) identified "problems of power and misunderstanding" as important in boundary conflicts. Lacking an adequate conception of the focal job, role senders beyond the departmental or organizational boundary were capricious and overexacting in their demands upon the focal person. Moreover, these unknowing role senders were unforgiving when the focal person was unable to comply with their expectations.

Role senders' conceptions of the focal office also affect the degree of ambiguity experienced by the focal person. Data on this point were obtained in the intensive study through use of the index of job conception adequacy, the construction of which is described in Appendix M. For each focal office a Master Activities List was prepared, listing the activities associated with this office. Each role sender was assigned a job conception adequacy score based on the degree to which his conception of the focal office reproduced the complete contents of the Master Activities List for that job. These scores, averaged for all role senders in a given role set, provided some indication of the degree to which members of the set were familiar with the requirements of the focal office.

The data indicated that among white-collar workers in the intensive

study, focal persons whose role senders were below the sample median on adequacy of job conception were significantly more likely ($p < 0.05$) to score high on the general ambiguity index than were those focal persons whose role senders had a more thorough knowledge of the focal offices. The association between job conception adequacy and experienced ambiguity did not obtain for blue-collar focal offices. In the intensive study the blue-collar offices were for the most part linked to semiautomated assembly lines. Functional coordination between positions was not so much worked out by the occupants themselves as it was applied from above by the designers of the machinery and the line. Under these circumstances, if one's role senders did not thoroughly understand one's job, it was no more ambiguous than where such an understanding was present.

The adequacy with which role senders conceive the focal job, like sent pressure toward change, has direct implications for the degree of stress experienced by the focal person. We have seen that the sources of conflict-inducing expectations could be ascribed to the relation of specific organizational positions to the focal office. The parallel question can be asked about the variations among role senders in their conception of the focal job: To what extent are these variations associated with the occupancy of different formal positions in relation to the focal person? Three general conclusions may be made in response to this question:

1. The adequacy of a role sender's conception of the focal job is positively related to his organizational proximity to it (Table 10-4).

The greatest single difference in job conception adequacy occurs

Table 10-4 Adequacy of Role Sender's Conception of the Focal Job in Relation to Organizational Proximity (from the intensive study)

<i>Proximity of Role Sender and Focal Person</i>	<i>Mean Adequacy of Job Conception¹</i>	<i>N</i>
Same work section	40	(213)
Related work sections, same department	38	(54)
Unrelated work sections, same department	36	(22)
Different departments, with role sender serving as liaison	35	(50)
Different departments, with role senders not serving as liaison	29	(39)

¹ The *F*-test of over-all differences among means is significant at $p < 0.001$.

between the two groups of role senders outside the department of the focal person. Adequacy scores of people in liaison roles show that their understanding of the focal role is more like that of some insiders rather than that of outsiders, a fact which contributes to their effectiveness and to their own stresses.

2. The association between job conception adequacy and relative status is explicable partly in terms of organizational proximity, but indicates also that a person's superiors are likely to know more about his job than his subordinates or his peers.

Table 10-5 gives the mean scores on adequacy of job conception for each of the nine relative status groups. Figure 10-2 presents the same data graphically for the four relative status groups in a direct line of command with the focal position.

Two factors operating simultaneously would tend to give this graph its nonlinear character. First, as we have seen, the more organizational boundaries between a role sender and a focal person, the less adequate is the sender's conception of the focal job. Second, if proximity is held constant, superiors have a better idea of the focal job than do subordinates. Moreover, this superior-subordinate difference is more pronounced two levels away from the focal position than it is one level away (a difference of nine versus five). These differential drop-offs raise some provocative questions. Would the differences become more or less pronounced were we to compare superiors and subordinates three, four, and five levels away from the

*Table 10-5 Adequacy of Role Sender's Conception of the Focal Job in Relation to Relative Status and Authority*¹ (from the intensive study)

	<i>Direct</i>		<i>Indirect</i>	
	<i>Mean Adequacy</i>	<i>N</i>	<i>Mean Adequacy</i>	<i>N</i>
Superior (2)	37	(25)	42	(6)
Superior (1)	44	(52)	35	(23)
Peer			38	(70)
Subordinate (1)	39	(137)	30	(37)
Subordinate (2)	28	(10)	37	(12)

¹ The *F*-test of over-all differences among means is significant at $p < 0.01$.

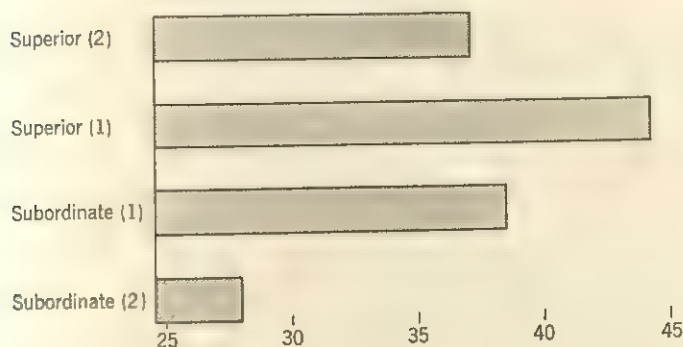


Figure 10-2. Job conception adequacy and relative status (from first column of Table 10-5).

focal job? How many levels up or down from the focal position must we go before we find the superior and subordinate curves beginning to converge on the zero adequacy point?

3. The adequacy of a role sender's conception of the focal job is a positive function of the extent to which his own job depends on that of the focal person.

Although Table 10-6 indicates an appreciable association between adequacy of job conception and functional dependence, it provides only a hint as to the importance of functional dependence in the prediction of job conception adequacy. The full story is found in an

Table 10-6 Adequacy of Role Sender's Conception of the Focal Job in Relation to Functional Dependence of Role Sender on the Focal Person (from the intensive study)

<i>Functional Dependence</i>	<i>Mean Adequacy¹</i>	<i>N</i>
High	43	(134)
Moderate	36	(107)
Low	35	(137)

¹ The *F*-test of over-all differences among means is significant at $p < 0.001$.

additional analysis of the correlates of job conception adequacy carried out through a Lippitt analysis of variance. The Lippitt analysis differs from classical analysis of variance techniques in that the predictor variables need not be uncorrelated in order to obtain independent probability estimates for the various predictor-criterion variable relationships. In many respects this technique is analogous to multiple classification analysis, providing the multiple correlation of all the predictor variables with a single criterion variable. With job conception adequacy as the predicted criterion variable, the Lippitt analysis was used to assess the associations between this variable and six types of relationship between the role sender and the focal person: formal authority; organizational proximity; functional dependence; length of personal acquaintance; * frequency of communication; * and frequency of personal encounter.*

Among these six predictor variables, all of which might plausibly be related to knowledge of the focal job, the single best predictor was the functional dependence of role sender on focal person. This finding casts doubt on the osmotic hypothesis that frequent contact at work will cause one person to learn about another's job; the data suggest instead that irrespective of the amount of interaction between two people the role sender will learn about the activities of the focal job only if they are relevant to the activities of his *own* job. Functional dependence, not frequency of interaction, is the best predictor of a role sender's knowledge about the focal job.

Organizational Norms and Role Relations

Organizational norms, as was shown in Chapter 9, are not held with absolute unanimity; rather, they are expectations which apply broadly within an organization and are more or less shared by its members. If two role senders are compared as to the extent to which they share a norm relevant to the behavior of the same focal person, differences in their normative expectations can be attributed to two classes of variables: (a) enduring characteristics of the role senders themselves, such as organizational position or personality; and (b) role relational characteristics of each role sender *vis-à-vis* the focal position. Much of the previous research on organizational norms has tended to take the former approach, relating the advocacy of close supervision, for example, to blue-collar and white-collar differences, or to differences in authoritarian personality trends. Data in Chapter 9 embodied this

* As estimated by the role sender.

approach, relating normative expectations to four characteristics of role senders: tenure, rank, supervisory responsibility, and blue-collar or white-collar position.

Norms, however, are neither formed nor exercised in the abstract. They are always exercised with regard to some particular person in a particular position. They may therefore be expected to vary with the role relation between norm sender and target, just as sent pressure and adequacy of job conception have been shown to vary with these relations.

The average position of role senders within each role set on three dimensions of normative expectations—rules orientation, closeness of supervision, and universalism—is associated with the degree of role conflict to which the focal person is subjected (Chapter 9). Normative expectations thus resemble sent pressure and inadequacy of job conceptions in that they are expectations held by role senders which contribute to stressful conditions for the focal person. Accordingly, a question already asked with reference to sent pressure and adequacy of job conception may equally well be asked concerning these three sets of organizational norms. Is the degree to which a member of the role set expects the focal person to conform to these norms associated with their functional dependence, proximity, and relative status?

Data answering this question are presented in summary form in Table 10-7. All entries in the cells of this table indicate significance

Table 10-7 Three Organizational Norms in Relation to the Role Relations of Focal Person and Role Sender (from the intensive study)

	<i>Organizational Norm</i>		
	<i>Rules Orientation</i>	<i>Closeness of Supervision</i>	<i>Universalism</i>
Role relations of focal person and role sender	High functional dependence of role sender	High functional dependence of role sender	High functional dependence of role sender
	Organizational distance	Organizational distance	
	Superior status of role sender	Superior status of role sender	Superior status of role sender

at the 0.05 level or beyond as determined by the *F*-test of over-all differences among normative score means as a function of different levels of the role relational variables. The caption in each cell indicates which level of the role relational variable showed the highest score on the normative variable in question.

The first column of this table indicates that a role sender who wants the focal person to be highly rules oriented tends to be functionally dependent on him but organizationally distant from him. This combination, somewhat paradoxical in light of the correlation between organizational proximity and functional dependence ($r = .30$), is readily understandable if we put ourselves in the shoes of such a role sender. This role sender needs to be assured of the predictability and regularity of the focal person's behavior. When the focal person suddenly alters his behavior, members of his role set who are organizationally close to him can observe the change directly and adjust accordingly. Members who are distant but independent of the focal person can tolerate belated information about his deviations. The distant but dependent role sender can neither observe quickly nor readily tolerate delayed observation. Accordingly, he advocates adherence to the letter of organizational law, thus attempting to make predictable an important part of his environment—the behavior of the focal person.

An extreme example of such a situation may be found in a diplomatic corps. The central office of such a corps must assure the adequate performance of emissaries to foreign nations, since the activities of the central office are highly dependent on the activities of its emissaries. But the central office is in an unfavorable position to observe firsthand the behavior of its staff in remote areas. The result has been a formal system of demands which has become the symbol of rigid compliance with organizational rules—diplomatic red tape. On a lesser scale, however, the same process is observable in the relationships between the headquarters and field units of most large organizations. The history of such organizations offers recurrent examples of the field champion who moves to the headquarters unit full of the reformer's zeal, and remains to disappoint his former colleagues by adapting to the requirements of his new role.

The people who least want the focal person to be rules oriented are his immediate subordinates. This is consistent with their emphasis on particularistic rather than universalistic norm sending to the focal person. They want him to withhold from higher-ups information which puts co-workers in a bad light, to try to cover up errors made by those under him, to do favors for friends contrary to company

rules, to give special attention to friends in making promotional recommendations, and to defend his co-workers from criticism by their superiors. In short, immediate subordinates want the focal person to regard them as persons rather than as position occupants, and to take personal considerations into account in making decisions which affect them. Immediate subordinates also constitute the group least likely to favor the norm of closeness of supervision by the focal person; the role senders most likely to demand that the focal person exercise tight control over those beneath him are his remote superiors. A comparison of the two subordinate groups, direct subordinates (1) and direct subordinates (2), indicates that it is the immediate subordinates who least want the focal person to supervise closely; this group is also the lower on rules orientation and universalism (Fig. 10-3). Those further below the focal person are less extreme in their demands regarding his supervisory performance. They are also less directly affected by inflexible supervisory behavior on his part.

The role relations of focal person and role sender therefore provide a meaningful basis for the prediction of normative expectations. This

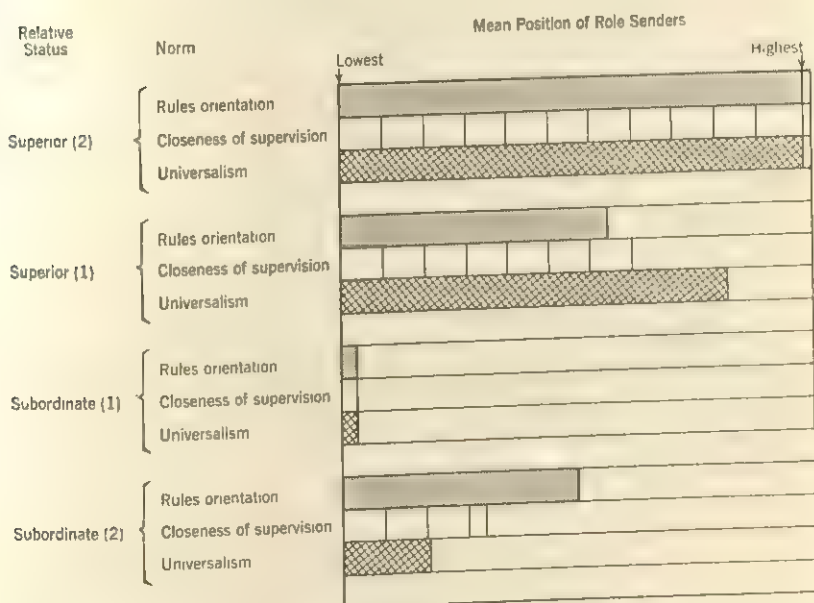


Figure 10-3. Mean positions of role senders on three normative dimensions in relation to relative status. Scores on the three organizational norms have been placed on a common scale.

approach complements the prediction of normative expectations on the basis of certain constant characteristics of role senders—company tenure, job status, white-collar versus blue-collar position, and amount of supervisory responsibility (Chapter 9). These four characteristics, together with the relational variables (functional dependence, proximity and relative status), yield a multiple correlation of .53 with rules orientation expectations and .45 with universalism. These seven variables in combination predict even more efficiently to the closeness of supervision norm, the multiple correlation in this case being .72.

Summary

Stress-inducing role expectations do not impinge on a focal person in a similar fashion from all points in his role set, nor do all members of a role set share a common conception of the focal office. The particular role relation between a role sender and the focal person uniquely colors the sender's perception of the focal office and shapes his role expectations. These perceptions and expectations are specifically affected by three types of formal role relations: the functional dependence of the role sender's office on that of the focal person, the organizational proximity of the focal person and the role sender, and the relative organizational statuses of the focal person and role sender.

The amount of conflict-inducing pressure a role sender places upon a focal person is a direct function of their organization proximity, whereas the association between sent pressure and functional dependence is curvilinear, the greatest pressure coming from those senders who are only moderately dependent on the focal person. A focal person receives the greatest amount of pressure from his direct superiors, the least amount from his peers.

The adequacy of a role sender's conception of the focal job is positively related to his organizational proximity to it and to his being in a position of superordination over it. The best single predictor of conceptual adequacy of a job, however, is the degree of functional dependence of the role sender's office on that of the focal person.

Organizational norms also vary systematically as a function of the role relation between the norm sender and norm receiver. Normative demands for high rules-oriented behavior and close supervision are, for example, most likely to be made of an individual by senders who are highly functionally dependent on him, organizationally distant from him, and of status superior to his.

11

Power, Influence, and the Role-Sending Process

EXPECTATIONS held by members of the role set have an impact on the focal person through various processes of social interaction and influence. The specific process, of course, differs from one issue to another and from one situation to another, but each interpersonal relationship involves a characteristic set of influence processes. The core of the theoretical model presented in Chapter 2 (reproduced in part in Fig. 11-1) represents a circular process of influence and counterinfluence. Chapter 10 dealt with the effects of interpersonal relations on the contents of role expectations and pressures (arrow 6). This chapter deals with the effects of these relations on the role sending process itself. Arrow 9 represents the

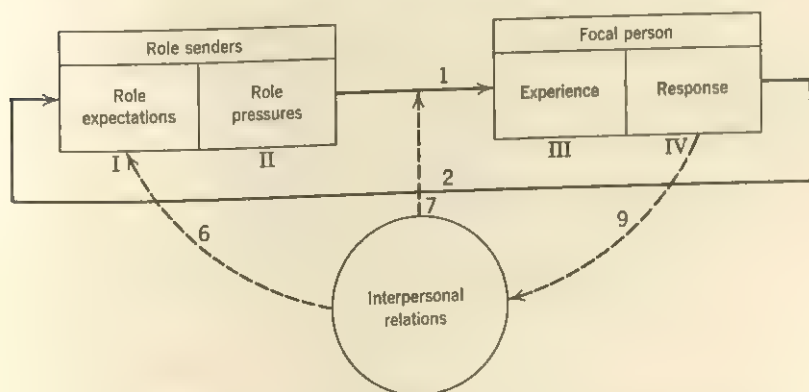


Figure 11-1. Partial model of factors involved in role conflict and ambiguity.

effects of coping techniques upon the focal person's interpersonal relations. Arrow 7 represents two clusters of implicit hypotheses: (a) various kinds of interpersonal relations affect the kinds of influence techniques that are used in exerting role pressures, and (b) the nature of the relationship between the focal person and a role sender mediates the effects of the sent pressures on the focal person's experience of and response to the situation. The latter hypothesis is treated in Chapter 12; the former is the subject of the present chapter.

Role Pressures and Psychological Forces

Role theory is predicated on the general assumption that a person's behavior is determined in part by the expectations held for him by certain significant others in related positions. There are, of course, other influences on one's behavior, which have yet to be dealt with in terms commensurate with the influence of role expectations. A more powerful role theory must handle such questions as these: How do role pressures from others create psychological forces on the person? How do these forces combine with other forces to determine the person's behavior?

At the present time these questions can be answered only in general and approximate terms, but it is clear that a distinction must be made between forces that exist in the person's psychological space and conditions or events that exist in his objective environment. What others expect him, want him, or even urge him to do is not necessarily what he will do. In fact, the impact of others' attempts to influence him is often quite different from that intended. This is quite clear when role senders' expectations or desires are in conflict; when a person cannot logically comply with all the pressures upon him, he must reject some.

The concepts of influence and power are central to the questions just raised. How do people influence one another's behavior? What are the bases or preconditions for influence? Under what conditions will the influence yield a result desired by the influencer? What other effects does it have? These are questions which must be faced if we are to form an adequate understanding of the role-sending process.

Effective and Attributed Power

The present study treats power in two ways: in terms of the extent to which a given role sender can get the focal person to do

what he wants him to do—called *effective power*; in terms of how much the focal person feels that the role sender influences his behavior on the job—called *attributed power*.

In estimating the effective power of a role sender, data were drawn from several sections of the role sender interview: open-ended questions on what the role sender would do were the focal person to fail to perform his job activities; questions concerning what the role sender had done in the past when he had trouble getting the focal person to do something; a question asking what the role sender could do as a last resort if the focal person failed to comply with his wishes; and a series of fixed-alternative questions covering various bases of power which the role sender could use or had used in the past. From these several sources and from descriptions and outcomes of past conflicts between role sender and focal person, each role sender was assigned a position on a five-point scale indicating his over-all power over the focal person rather than his intentions for him. Inter-coder reliability of this over-all power code was .90.

Data for attributed power were elicited from the focal person. He was asked about each of his role senders: *How important is this person in determining how you do your job?* Responses were given on a five-point scale ranging from *not at all* to *extremely*.

The correlation between the measures of effective and attributed power is a modest but significant .20; however, this should not be taken as an estimate of the validity of either measure. These variables are quite distinct conceptually, one dealing with influence from the point of view of the influencer, the other from the point of view of the one influenced. There is reason to expect these correlations to be modest. One role sender may be able to influence the focal person in desired directions quite readily, but seldom feel called upon to exert such influence. Another sender may have a major impact on the focal person in spite of difficulties in getting him to go along with his wishes. Although a sender may not obtain compliance with his expectations, these expectations may nonetheless have considerable impact upon the focal person in terms of tension and emotional turmoil.

The distinction between effective and attributed power is based on the following theoretical assumptions: Role pressures are conceived as specific attempts to influence the behavior of a person in a given position. Under most circumstances they generate a set of psychological forces on the person, only some of which are in the direction intended by the influencer. Other forces are generated by the sender's behavior even when he intends no particular influence. Attributed power reflects the effects of all these forces, whereas effective power

reflects only those which are in the intended direction and only when they result in the desired behavior.

Bases of Power and Varieties of Influence Techniques

French and Raven (1959) propose five general types of interpersonal power—legitimate, reward, coercive, expert, and referent—each of which is based on a kind of relationship between two persons and each of which is associated with a set of influence techniques. A sixth general type might be called indirect power, that in which one person influences another by inducing a third party to apply the influence directly. For any given pair of persons several types of power may be available, and a variety of influence techniques are generally used singly or in combination.

Data on specific techniques of influence were obtained with the use of both closed and open-ended questions. Two sets of questions (E-4 and E-6 through E-13 in Appendix Q) elicited scalar responses about the availability and use of different techniques representing all six types of power. In addition, senders were asked a series of open-ended questions asking each one what he would do if the focal person failed to perform his job activities properly, what he had done in the past when he had trouble influencing the focal person, and what he could do as a last resort to influence him. Responses to these questions were coded into *a priori* categories, representing a wide variety of ways in which one person might influence another. That a given response was coded into a particular category did not necessarily mean that the role sender had ever actually used this technique—only that he “might” use it. This “might” indicates that the respondent felt that the technique was available to him and that he was not constrained from using it if necessary.

All types of power are potentially relevant to the role-sending process, but they are not equally distributed within the role set and probably are not equally effective in creating the desired forces in the focal person. The relationship between the focal person and any given role sender determines in large measure the kinds of influence techniques available to the sender.

Functional Dependence and the Necessity for Power

When one asks who in a large-scale organization should be able to influence any particular member, the answer is by no means simple.

A basic principle in traditional theories of organization is unity of command. This principle holds that each member should have just one boss, a supervisor to whom the member is totally responsible and who has a legitimate right to control his behavior. In the extreme this would mean that each member has just one role sender. This state of affairs is in general realistically impossible even if it were desirable.

But more important, where the functions and technology of an organization are varied and complex, an intricate pattern of interdependence is almost always found. A person's behavior on the job is not a matter of concern to his supervisor alone. Many others need to have him perform in (more or less) specified ways if they are to carry out their functions and meet their objectives adequately. They have a vested interest in what he does and how he does it. This fact stems largely from the formal division of labor and the resultant requirement for coordination and integration of effort. It also grows out of the more personally defined needs and objectives of each of the person's immediate associates.

The concept of *functional dependence* between positions reflects the fact that one person's task can be accomplished adequately only if certain others perform their jobs in a satisfactory manner. It can well be argued that given the necessarily imperfect specification of responsibilities, the greater one's functional dependence on another, the more one needs to have available reasonably effective techniques for influencing that other. In the intensive study the measure of functional dependence (Chapter 10) indicated the total scope of the focal person's activities on which the role sender was functionally dependent.

Presumably some communication with role senders is required for the performance of any focal role. This requirement increases under conditions of high functional dependence. A moderate but highly significant correlation ($r = .35$, $p < 0.001$) is found between frequency of communication and functional dependence: the greater the need for coordination, the more frequent the communication. The correlation is not higher, of course, because the two parties often talk about many things in addition to required coordination of activities.

If one speaks more to those on whom he is functionally dependent, does this also mean that he can influence them more? The correlations here between functional dependence and power are even more modest though still significant: $r = .28$ with effective power and $r = .27$ with attributed power ($p < 0.01$ in each case). There is thus a tendency for those who most need to influence the focal person to have the power to do so, but that power may not always be adequate and there are others who also have power over him.

*Functional Dependence, Communication,
and the Formal Authority Structure*

The authority hierarchy is the organization's official mechanism of coordination and control. Let us turn now to the question of whether this mechanism generally fits the requirements of the functional dependencies. Table 11-1 shows the mean degree of functional dependence on the focal person for each of the nine categories of relative authority-status.

It is clear first of all that the focal person's immediate superiors are most dependent on him; they are able to perform their jobs only if the focal person performs virtually all parts of his job properly. The dependence of the supervisors derives not so much from the technological interconnectedness of their jobs with those of their subordinates as from the fact that these superiors are held accountable for the actions of their subordinates.

Immediate subordinates constitute the group with the second highest degree of functional dependence. If the focal person does not make the appropriate decisions or take facilitating actions, the work of his subordinates may become difficult or meaningless. But here, too, some of their concern centers around supervisory responsibilities, for example, the fairness with which the focal person allocates tasks among or takes disciplinary action with his subordinates. Nevertheless, in spite of and because of his authority over them, the focal person's own direct subordinates tend to have a high degree of functional dependence on him. We will consider later the extent to which they have power commensurate with this dependence.

Note also in Table 11-1 that those who are not in a direct line of command with the focal person are much less dependent on him. Two other trends are also evident. First, at any given distance from the focal person, his superiors tend to be more dependent on him than his subordinates. Second, the greater the organizational distance of the role sender, the less dependent he is on the focal person. The correlation between functional dependence and organizational proximity is .31 ($p < 0.01$), but the moderate size of this correlation suggests that the functional division of the organization into departments and work sections is not always as adequate as it might be.

Table 11-2 indicates that communication patterns within the role set match the functional dependencies fairly well.* Communication

* The results presented in Table 11-2 are based on the focal person's estimates of frequency of communication. A virtually identical pattern is found when the role sender's estimates are used, except that in all categories other than the direct subordinate, the sender's estimate a slightly higher frequency of communication.

Table 11-1 Functional Dependence of Role Senders on the Focal Person¹ in Relation to Relative Status and Authority (from the intensive study)

	<i>Direct</i>		<i>Indirect</i>	
	<i>Percentage of Activities Concerning Role Sender</i>	<i>N</i>	<i>Percentage of Activities Concerning Role Sender</i>	<i>N</i>
Superior (2)	95	(25)	47	(7)
Superior (1)	96	(52)	72	(23)
Peer			51	(73)
Subordinate (1)	81	(138)	62	(38)
Subordinate (2)	81	(10)	36	(12)

¹ Mean percentage of focal office activities concerning role sender at least "Somewhat." *F*-test of over-all differences among means is significant at $p < 0.001$.

frequencies are highest with those who are in a direct line of command with the focal person, particularly with his immediate subordinates, virtually all of whom he talks to at least once a day. Some of this talk, of course, is fairly superficial. The opportunities for coordination are present, but this probably should not be taken as evidence that it is successfully accomplished.

Three additional findings in Table 11-2 are worthy of note. First, there is a fairly high frequency of communication with peers in spite of their relatively low average functional dependence. It is among peers that one tends to find the strongest friendships; however, so much of their talk may be irrelevant to the work of either party. Second, individuals report communicating more with their subordinates than with their superiors in either the direct or indirect category ($p < 0.05$). Finally, there is a rather sharp correlation between organizational proximity and frequency of communication ($r = .52$, $p < 0.001$). This suggests that the organizationally (and perhaps geographically) distant role sender who does happen to have high functional dependence upon the focal person may find opportunities for coordination somewhat difficult. We noted earlier (Chapter 10) that one solution to this problem by the distant, functionally dependent role sender is for him to insist that the focal person adhere strictly to organizational rules, thereby insuring the predictability of the focal person's behavior.

Table 11-2 Mean Frequency of Communication with Role Senders in Relation to Relative Status and Authority (from the intensive study)

	<i>Direct</i>			<i>Indirect</i>		
	<i>Percentage Having Daily Contact</i> ¹	<i>Mean</i> ²	<i>N</i>	<i>Percentage Having Daily Contact</i> ¹	<i>Mean</i> ²	<i>N</i>
Superior (2)	64	5.1	(23)	14	2.7	(6)
Superior (1)	82	5.1	(50)	44	4.7	(22)
Peer				61	5.1	(69)
Subordinate (1)	95	6.2	(133)	47	4.6	(32)
Subordinate (2)	70	5.0	(8)	42	4.2	(12)

¹ A score of five or more. Test of association significant at $p < 0.001$.

² Scale: 7. Almost constantly; 6. Several times a day; 5. Once or twice a day; 4. Several times a week; 3. About once a week; 2. A few times a month; 1. Less often.

Power and Formal Authority Relationships

Formal organizational charts are at best idealized representations of the channels through which control over organizational activities is exercised. Their divergence from the actual power structure of organizations is notorious. Among the several bases of social power, only that of legitimate authority is wholly implied by the formal structure. Even this base depends in practice on the degree to which members adopt the values of the organization which confers such legitimacy. Other power differentials are typically conferred along with formal authority, for example, differential access to information or resources for rewarding or coercing. Yet the extent to which formal authority relationships imply such differentials is an open issue, and their implications for such "informal" power bases as appeals to personal friendship have been even less explored.

To what degree do the formal authority relations in organizations correspond to the observed power relations? For the organizations included in the intensive study, this question is answered in Table 11-3. This table shows relative status and formal authority in relation to the independently obtained code of effective power. When role sender and focal person are in the same direct line of command, the effective

power of the role sender increases monotonically with his status relative to the focal person. This increase is not, however, linear; a gross power differential occurs between the focal person's direct superiors and subordinates, with considerably smaller differences occurring *within* these two groups. Among role senders not in a direct line of command with the focal person, the effective power of the role sender over the focal person is also a monotonic function of relative status. The power of "indirect" role senders is generally less than the power of senders in a direct line of authority with the focal person, particularly where his status superiors are concerned. The power of peers over the focal person is less than that of any superior status groups, but greater than that of any of his subordinates.

If this table presents no surprise, it probably should arouse some concern. For although direct superiors who have perhaps the greatest need to influence also have the power to do so, others who need to influence the focal person in order to do their jobs are relatively powerless. They have a vested interest in his performance but generally lack the ability to put power into the role pressures they exert on him. Some organization theorists will find this table reassuring; the concept of unity of command has some empirical confirmation. The focal person himself might see this as a desirable state of affairs. Few of us want more than one boss. But most of us would like to be able to influence those on whom we are dependent and those who influence us. These findings indicate that subordinates are largely frustrated in this respect. Although coordination between their jobs and that of the su-

Table 11-3 Mean Effective Power of Role Sender over Focal Person in Relation to Relative Status and Authority (from the intensive study)¹

	<i>Direct</i>		<i>Indirect</i>	
	<i>Mean</i>	<i>N</i>	<i>Mean</i>	<i>N</i>
Superior (2)	4.5	(25)	3.5	(6)
Superior (1)	4.1	(52)	2.7	(23)
Peer			2.4	(70)
Subordinate (1)	2.0	(137)	2.3	(37)
Subordinate (2)	1.8	(10)	1.3	(12)

¹ *F*-test of over-all differences among means is significant at $p < 0.001$.

perior (i.e., the focal person) is required, they must generally do the adjusting. They are typically unable to elicit adjustments from him.

But let us consider this situation with respect to the power the focal person attributes to his associates. Table 11-4 presents the findings for each of the nine relative status-authority categories. There is, indeed, a tendency to attribute more power to superiors than to subordinates in the direct line of command, but the sharp differential between them is not found here. Subordinates and peers alike have a substantial impact on the focal person in spite of the fact that they may encounter difficulty in gaining his overt compliance with their requests. It seems that their role pressures do induce significant forces on him and he feels they must be taken seriously. But they less often result in the intended consequences. Thus the unity of command may well exist with respect to overt action (effective power), but the focal person does not feel that he has just one boss. In fact he feels pressures coming from all sides even if he does not comply with them.

The dilemma here stems in part from the high magnitude of the direct superior's power. If one must conform to the supervisor's every demand, there may be little latitude for compliance with pressures from others. When those others have what they consider to be legitimate requests and they are denied, they often return with renewed pressure, at which time they might use more extreme (but perhaps no more successful) influence techniques. To the extent that the focal person feels this added pressure and finds it stressful, he will attempt to cope with it in the best way he knows how; and if there are inter-

*Table 11-4 Mean Power Attributed to Role Senders in Relation to Relative Status and Authority (from the intensive study)*¹

	<i>Direct</i>		<i>Indirect</i>	
	<i>Mean</i>	<i>N</i>	<i>Mean</i>	<i>N</i>
Superior (2)	4.5	(23)	3.2	(6)
Superior (1)	4.6	(50)	3.7	(22)
Peer			3.9	(70)
Subordinate (1)	3.9	(133)	3.9	(32)
Subordinate (2)	4.1	(8)	3.8	(12)

¹ *F*-test of over-all differences among means is significant at $p < 0.001$.

personal repercussions, for example, rejection or counterattack, they are apt to be directed toward the (weaker) subordinates rather than the (stronger) superiors.

The answer may as often lie in reducing the power (or at least the pressure) from superiors so that the focal person can be more responsive to the needs of his subordinates and peers. Coordination generally needs to involve a process of mutual influence with some adjustment on both sides. Certainly both parties will be more motivated to coordinate their activities in this kind of give-and-take atmosphere.

Authority Relations and Influence Techniques

The results discussed so far represent only in a very global way the complex associations between an organization's authority and power structures. Let us turn now to a more detailed consideration of particular interpersonal influence processes. If every effective role sending involves some power implication, that is, some consequences of compliance or noncompliance, what are the bases of that power? What influence techniques are available and under what conditions are they used? The various influence techniques people use to enforce their role expectations are closely related to matters of formal status and authority.

Formal Authority and Legitimate Power

The most conspicuous among influence techniques based on formal authority are direct orders and commands. Table 11-5 presents the association between relative status and the percentage of role senders replying to the open-ended power questions that they might order or command the focal person to comply with their expectations. Clearly those most able and willing to exercise this legitimate authority over the focal person are his superiors in the direct chain of command. The entries of near zero in the remaining cells indicate that the hierarchical plan is well actualized. Even the touch of organizational anarchy implied by the entries of 3 and 4 per cent in the indirect column may be spurious; a response that "I tell him to do it" would have been coded as an order, even if it were intended as a request.

Particularly interesting in Table 11-5 is the fact that less frequent references to legitimate authority are made by immediate superiors, direct superiors (1), than by those more remote in the hierarchy, indirect superiors (2). Since a person works more closely with his imme-

*Table 11-5 Percentage of Role Senders Reporting Being Able to Order the Compliance of the Focal Person in Relation to Relative Status and Authority*¹
(from the intensive study)

	<i>Direct</i>		<i>Indirect</i>	
	%	Base N	%	Base N
Superior (2)	60	(25)	0	(6)
Superior (1)	24	(52)	4	(23)
Peer			4	(70)
Subordinate (1)	3	(137)	3	(37)
Subordinate (2)	0	(10)	0	(12)

¹ Test of association significant at $p < 0.001$.

mediate superior than with the person two or more levels above him, it is likely that affective relations become more important. The desire of an immediate superior to develop and maintain these affective ties might reduce his willingness to use such naked influence techniques as direct commands.

A similar pattern is found in response to the question: *To what extent could you use the authority you have to make the final decision when taking up a question with (the focal person)?*

Table 11-6 indicates that this is also almost entirely a base of power

*Table 11-6 Mean Ability to Use One's Authority over Decisions in Relation to Relative Status and Authority*¹
(from the intensive study)

	<i>Direct</i>		<i>Indirect</i>	
	Mean	N	Mean	N
Superior (2)	4.6	(24)	3.7	(7)
Superior (1)	4.3	(51)	2.9	(23)
Peer			2.3	(69)
Subordinate (1)	1.6	(136)	2.0	(36)
Subordinate (2)	1.0	(10)	1.5	(12)

¹ F-test of over-all differences among means significant at $p < 0.001$. Tables 11-6, 11-7, and 11-8 employ 5-point scales ranging from "never" or "not at all" to "usually" or "a great deal."

for superiors, but peers rarely and indirect superiors sometimes also feel this is something they can fall back on. Note the similarity of these means to effective power for each of the nine categories (Table 11-3). A correlation of .74 is found between the effective power index and the question on use of one's authority. But before concluding that this is the effective power base, let us consider other influence techniques.

Reward and Coercive Power

Another implication of organizational status is differential access to resources for rewarding compliance or punishing lack of compliance with one's expectations.

Table 11-7 indicates the mean extent to which role senders feel they can reward the focal person in some way, for example, by recommending him for a promotion or raise. As with legitimate authority, control over both these rewards is concentrated in the hands of one's direct superiors. Seventy per cent of the direct superiors replied to open-ended questions that they might offer the recommendation of a raise as a means of influence, whereas no more than 11 per cent in any other category suggested they might do so. Reward power is also highly correlated ($r = .63$) with the over-all index of effective power.

For the most part, the reins of coercive power—the ability to punish—are also in the hands of direct superiors. Table 11-8A indicates the extent to which people in various positions feel that they “could make things difficult for (the focal person) on the job if he refused

*Table 11-7 Mean Reward Power of Role Senders over the Focal Person in Relation to Relative Status and Authority*¹ (from the intensive study)

	<i>Direct</i>		<i>Indirect</i>	
	<i>Mean</i>	<i>N</i>	<i>Mean</i>	<i>N</i>
Superior (2)	4.0	(25)	2.3	(7)
Superior (1)	3.7	(51)	2.4	(23)
Peer			2.2	(73)
Subordinate (1)	1.5	(135)	1.8	(37)
Subordinate (2)	1.0	(10)	1.0	(12)

¹ *F*-test of over-all differences among means significant at $p < 0.001$.

Table 11-8 Coercive Power of Role Senders over the Focal Person in Relation to Relative Status and Authority (from the intensive study)

*A. Mean Ability to Make Things Difficult on the Job*¹

	<i>Direct</i>		<i>Indirect</i>	
	<i>Mean</i>	<i>N</i>	<i>Mean</i>	<i>N</i>
Superiors (2)	4.5	(24)	4.8	(6)
Superiors (1)	4.0	(50)	3.4	(22)
Peers			3.0	(67)
Subordinates (1)	2.6	(132)	2.9	(36)
Subordinates (2)	2.3	(10)	1.4	(11)

*B. Mean Ability to Take Disciplinary Action*²

	<i>Direct</i>		<i>Indirect</i>	
	<i>Mean</i>	<i>N</i>	<i>Mean</i>	<i>N</i>
Superiors (2)	4.1	(24)	2.8	(6)
Superiors (1)	3.6	(50)	1.7	(23)
Peers			1.3	(70)
Subordinates (1)	1.3	(135)	1.4	(36)
Subordinates (2)	1.1	(10)	1.0	(12)

¹ *F*-test of over-all differences among means significant at $p < 0.01$.

² *F*-test of over-all differences among means significant at $p < 0.001$.

to do something." Here superiors in both the direct and indirect categories feel that they can take recourse to coercion. The most legitimate form of coercive power is represented in the phrase *disciplinary action*. Table 11-8B indicates that the threat of official punishments as an influence technique is almost exclusively available to direct superiors.

Other, more specific kinds of coercion are also generally controlled by superiors in the status hierarchy. Tables 11-9a, 11-9b, and 11-9c indicate that while these are seldom used, threat of transfer, of dismissals, and of blocking promotion or salary increase is the virtually exclusive domain of superiors.

There is one source of coercive power, in marked contrast, which

one's superiors are relatively reluctant to use—that of withholding aid, information, or cooperation [Table 11-9(d)]. Such reluctance is very likely a function of the extent to which the performance of the unit would be jeopardized were such cooperation withheld. In the extreme such behavior would amount to organizational suicide for the superior, since he is directly accountable for failures of the focal person. Consistent with this finding, superiors declared themselves more willing than any other group to remedy the performance deficiencies of the focal person by "working with him and helping him." Thirty per cent of superiors indicated they would work with and help the focal person in this eventuality; the comparable figure for peers was 18 per cent and that for subordinates only 11 per cent. Not only are one's superiors most unwilling to risk loss of performance by withholding help; they are also most ready to give help should performance problems arise.

On the other hand, the status group most ready to withhold aid, information, or cooperation are the subordinates two levels below the focal person and in the same chain of command. Eighty per cent of this group mention withholding as a means of controlling the focal person, and they are ideally situated to exercise such control. They are sufficiently removed from the focal person that they do not suffer the

*Table 11-9 Availability of Coercive Influence Techniques in Relation to Relative Status and Authority*¹ (from the intensive study)

	<i>Superiors</i>	<i>Peers</i>	<i>Subordinates</i>
(a) Percentage of role senders indicating they might threaten the focal person with transfer in order to influence him ²	28	4	2
(b) Percentage indicating they might threaten dismissal ²	24	1	1
(c) Percentage indicating they might threaten blocking salary increase or promotion ²	12	1	0
(d) Percentage indicating they might withhold aid, information, or cooperation ²	19	32	44
Base <i>N</i>	(106)	(70)	(196)

¹ Status-authority categories have been combined to simplify the table. Data are based on coded responses to the open-ended power questions.

² Test of association significant at $p < 0.001$.

immediate repercussions of his difficulties. At the same time, they (unlike the indirect subordinates of the same status) are sufficiently close to the departmental machinery to know exactly where and how to throw the monkey wrench so that it will create maximum difficulty for the focal person and minimum difficulty for themselves.

It seems likely that threats of withholding aid and the like must be implicit except under unusual circumstances. An overt threat of such a kind would generally leave the threatener quite vulnerable to retaliation unless he controlled all the power, and this clearly is not the case for subordinates. The responses in this category of influence seem to indicate what the role sender might resort to if he became sufficiently dissatisfied with the focal person's behavior. Responding in this uncooperative fashion is unlikely to gain compliance with one's requests, but the implicit threat of such a reaction may lead the focal person to maintain at least minimal satisfaction for his subordinates.

Expert and Referent Power

The one type of power that seems to be in virtually universal use is that which French and Raven (1959) refer to as expert power. It is conceived as that power which stems from the one person's respect for another's knowledge and judgment. The role senders were asked: *To what extent could you rely on the confidence (the focal person) places in your special knowledge or advice as a means to getting him to do something?* The average answer for the total sample was 4.2, on a scale for which 4 represents *quite a bit* and 5 is *a great deal*. Interestingly, in none of the nine status-authority categories is the mean less than 4.0.

These findings smack of more than a little vanity, but in fact the focal persons report having that much respect for their role senders' knowledge and judgment. Moreover, the influence techniques associated with expert power—bringing new information about the situation, explaining, clarifying, reasoning, arguing, talking it over in a general attempt to persuade the other to one's point of view—are used more commonly than are any others. Eighty-six per cent of the superiors, 81 per cent of the peers, and 72 per cent of the subordinates report using such techniques. These techniques are available to virtually everyone and with proper tact can be used without fear of retaliation. Of course, they are not always effective. One is often less persuasive than he would like to be; listening is not the same as hearing or believing.

Referent power, based on one person's attraction to or identification with another is less often used overtly. Few respondents indicated spon-

taneously that they would use personal friendship as a means of influencing the focal person. Some interesting intergroup differences are apparent, however, in the admitted use of such friendship appeals on past occasions. Table 11-10 indicates that such appeals are most characteristic of role senders who are *not* in the same line of command with the focal person. Only the remote subordinates, direct subordinates (2), report that they never have used such appeals; and, consistently enough, 80 per cent of these people have already declared themselves willing to withhold aid, information, or cooperation for the sake of influencing the focal person. That for each relative status level the indirect line of command groups are the more likely to use friendship appeals suggests that in formal organizations such appeals are used largely to compensate for deficiencies in other types of power. This finding substantiates an assumption made in the discussion of boundaries (Chapter 6): namely, that individuals interacting across departmental lines must rely heavily on personalized friendship appeals as a means of influence. Their abilities to modify each other's behavior as best suits their individual needs are based on affective bonds—bonds which are often chronically strained by the demands of others in their respective departments.

Perhaps the most interesting aspect of these findings is that overt appeals to friendship seem often to be made where the bonds of friendship appear weakest. One may rely on friends for cooperation and personal favors, but calling his attention to the friendship in the midst

Table 11-10 Percentage of Role Senders Reporting the Use of Friendship Appeals in Influencing the Focal Person in Relation to Relative Status and Authority¹ (from the intensive study)

	Direct		Indirect	
	Per Cent	Base N	Per Cent	Base N
Superior (2)	17	(25)	33	(6)
Superior (1)	18	(52)	48	(23)
Peer			37	(70)
Subordinate (1)	20	(137)	27	(37)
Subordinate (2)	0	(10)	42	(12)

¹ Test of association significant at $p < 0.01$.

of an influence attempt is often distasteful to the other person. Friendships seem to "wear thin" with such reminders. But this should not be taken as an indication that referent power does not operate in large-scale organizations. Affective bonds of trust, respect, and attraction are formed with close associates, and cooperative attitudes generally go along with them. But the influence process is often more subtle and less overt. Direct influence attempts, other than making one's wishes known, often are not necessary. There seems to be a general tendency to identify with one's supervisor (perhaps because of his power and status), and it is likely that much of his influence is based on this identification process rather than on direct orders, promises of reward, or threats of punishment.

Indirect Power

Indirect processes of influence (i.e., those using a third party intermediary) are very common in large-scale organizations. In Chapter 10 data were presented indicating that those in the direct superior (2) groups frequently rely on indirect influence, with direct superiors (1) being the third parties. A similar relationship holds for the subordinate groups as well, 50 per cent of the direct subordinate (2) group using intermediaries and only 25 per cent of the direct subordinate (1) group doing so. The availability of intermediaries who might intervene in their behalf may be the saving grace of peers and subordinates. Eighty-eight per cent of the peers, 77 per cent of the subordinates, and 54 per cent of the superiors mention they could go to his or their superiors or to "higher management" as a means of influencing the focal person.

For many subordinates this is a last resort kind of action only to be used on very important issues. There are strong standards against going over a superior's head even when one has nowhere else to turn. Peers may do so with relatively greater impunity, especially those who share a direct supervisor with the focal person.

In general indirect influence is the primary tactic of those who are organizationally distant—two or more levels above or below the focal person. Its availability is very significant to all those who are not in a direct line of command with him; although they may prefer to go directly, the fact that they can go through channels to his boss gives them power they may not have directly.

We should bear in mind that role pressures exerted through a third party are usually filtered by that person's frame of reference. The intermediary can distort or elaborate the message, soften or strengthen

the pressure, and change its direction altogether. Indirect role sendings may be seen as originating in the intermediary. Conversely, direct influence attempts are often presented as if they had been initiated by others, for example, as if it were a grass roots movement and a majority of the department members stand behind it. The possibilities of "political" manipulation are legion. Indirect influence may be quite open and innocent or Machiavellian in its complexity and deceptiveness. Nevertheless it is quite a different process from the direct sending of role pressures.

Effectiveness of Influence Techniques

An evaluation of the effectiveness of various influence techniques is difficult if not considered in the context of a specific situation. Prob-

Table 11-11 Correlations Between Effective Power and the Availability of Various Influence Techniques¹ (from the intensive study, N = 381)

<i>Influence Techniques</i>	<i>Correlation (r) with Effective Power</i>
Legitimate power:	
1. Use one's authority to make the final decision	.74 *
2. Direct order or command	.31 *
Reward power:	
3. Recommend for promotion or raise	.63 *
Coercive power:	
4. Disciplinary action	.80 *
5. Make things difficult on the job	.61 *
Expert power:	
6. Rely on his confidence in one's knowledge	.18 *
7. Bring new information about the situation	.01
8. Convince him it is right for company	.07
Referent power:	
9. Appeal to friendship	.22 *
10. Ask personal favors	.04
11. Appeal to company loyalty	.19 *
Indirect power:	
12. Go through channels or some other person	.06

¹ Based on responses to fixed alternative questions.

* $p < 0.001$.

ably one would be well advised to limit almost all of his influence efforts to simple requests and persuasion attempts, in which the decision will presumably be made rationally. But the fact is that this is generally effective to the extent that the role sender has available other kinds of power to back up his requests. One need not threaten massive retaliation very often to have his modest requests taken seriously. "Walk softly and carry a big stick" may be a useful adage in organizational life as well.

Table 11-11 presents the correlations between the index of effective power and various power bases or influence techniques. There is an impressive cluster of legitimate, reward, and coercive techniques which contribute significantly to the role sender's effective power. These are available almost exclusively to the focal person's organizational superiors. The power cards are indeed stacked in favor of the formal authority structure. This does not mean, of course, that superiors spend much of their time ordering or bribing or threatening. But their ability to do so is well known, so that role pressures from above generally result in the desired action. In contrast the types of power available to subordinates and peers—expert, referent, and indirect for the most part—tend not to be so highly associated with effective power.

The futility of subordinate role senders is demonstrated in the results in Table 11-12. In response to the question: *What would you do if (the focal person) failed to do this?*, asked about each of his activities, many role senders indicated alternatives to continued influence

Table 11-12 Percentage of Role Senders Avoiding Influence Efforts¹ in Relation to Relative Status and Authority (from the intensive study)

	<i>Superiors</i>	<i>Peers</i>	<i>Subordinates</i>
(a) Do it myself ²	36	46	66
(b) Drop it, do nothing ²	6	17	34
(c) Turn it over to someone else ³	24	10	19
Base <i>N</i>	(106)	(70)	(196)

¹ In response to query: *What would you do if (focal person) failed to do this?* percentages can add to more than 100 per cent because the question is asked with regard to each of the focal person's activities, each of which could elicit a different response.

² Test of association significant at $p < 0.001$.

³ Test of association significant at $p < 0.10$.

efforts. Their general lack of power is reflected in the subordinates' and to lesser extent the peers' turning away from continued role pressures in favor of *dropping it* or *doing it themselves*. That superiors sometimes do it themselves or assign it to others probably indicates not a lack of effective power but rather a recognition of the focal person's inability to perform the task. Superiors also tend to indicate the further consequences of the focal person's hypothetical failure, for example, reprimand him, get rid of him, fire him. But it is the subordinates who frequently report that they can do nothing to get the focal person to do the task.

Summary

Role pressures are exerted through social influence processes and techniques which are based primarily in the formal role relations between the role sender and the focal person. Although the functional dependence of role senders on the focal person—an indication of the need for influence over him—is distributed throughout the role set, power is highly concentrated in the hands of his direct superiors. Legitimate power, reward power, and coercive power are almost exclusively theirs.

Peers and subordinates must fall back on expert, referent, and indirect influence techniques. Even when they are dependent on the focal person's performance of certain activities, if he should fail to do them, subordinates and peers frequently can do nothing or must perform the activities themselves. But in spite of their general inability to gain the focal person's compliance with their requests (they lack effective power), they do have an impact on him. The focal person does attribute power to them as well as to superiors, and finds that role pressures from any direction can be a source of stress.

12

Role Relations and Response to Stress

PERHAPS the significance of social relations in problems of role conflict and ambiguity has been amply demonstrated by now. The exertion of role pressures is itself a process of social influence determined largely by the interpersonal context in which it occurs (Chapter 11). But if the role-sending *process* is a product of interpersonal relations, so is the *content* of those sendings (Chapter 10). Pressures toward change in the focal person's behavior vary systematically with formal role relationships. Thus the pattern of interpersonal relationships within the role set is a partial determinant of role conflicts. We have seen (Chapter 4) that interpersonal relations are also frequently disrupted by role conflict, and that certain methods of coping with conflict (e.g., withdrawal, aggression, rejection of senders) lead to a deterioration of social relationships.

There is still another way in which interpersonal relations are relevant to problems of role conflicts. The nature of one's relations with his role senders affects the way he experiences and responds to conflicts. That is, interpersonal relations mediate in various ways the emotional and behavioral consequences of role conflict and ambiguity. The present chapter is devoted to such mediating effects.

Frequency of Communication and Reactions to Conflict

The tendency to withdraw from others, to avoid contacts with them, or to reject their influence efforts during times of stress makes sense as a coping method only if it results in a reduction of the stress

or the associated strains. How effective are these coping techniques? How successfully do they protect an individual from stress and strain? These questions can be answered fully only by experimental or longitudinal field research in which the extended effects of specific coping behavior can be observed in detail. The present study, in spite of its correlational nature, can provide some evidence of the probable effectiveness of these coping mechanisms by comparing the consequences of conflict when the focal person is in close contact with his role senders and when he is not.

If withdrawal is a successful coping procedure, we should expect objective role conflict to generate inner conflicts of high intensity when the focal person is in close touch with those imposing the conflict but not when he is in less close touch. Figure 12-1 indicates that this is indeed the case; a high degree of objective role conflict coupled with a high frequency of communication with one's role senders results in a very high intensity of experienced conflict. Under none of the other conditions is the experience of conflict so great.

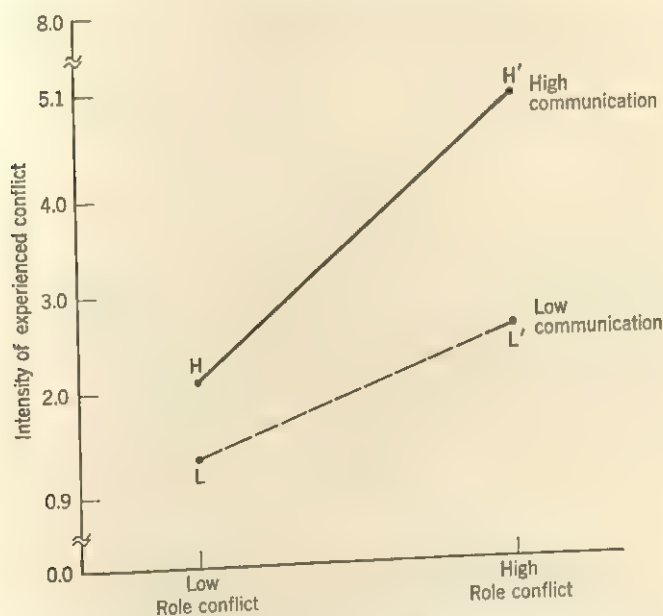


Figure 12-1. Mean intensity of experienced conflict in relation to role conflict and frequency of communication with role senders (from the intensive study). *N*: *H* = 17; *H'* = 9; *L* = 6; *L'* = 18. *Comparison* - *H* (2.1) vs. *H'* (5.0): $p < 0.05$; *L* (1.3) vs. *L'* (2.6): n.s.

Figure 12-2 shows that objective conflict leads also to a high degree of experienced ambiguity when communication rates are high but not when they are low. This is a somewhat curious finding, because one might expect frequent communication to be associated with clarity, not ambiguity. This tends to be the case when there is little role conflict, but when communications are the vehicle of conflicting role pressures, more communication conveys greater uncertainty and confusion.

If those who communicate little with their role senders are protected to some extent from the stress of role conflicts, they should maintain their satisfaction with the job and avoid feelings of futility in it. Figures 12-3 and 12-4 indicate this to be the case. For those role sets characterized by low communication rates, conflict leads to only a modest reduction in job satisfaction and increase in futility. The focal person who talks frequently with his associates is more satisfied when relatively free of conflict, but his job satisfaction is seriously undermined when the conflict becomes intense. Moreover, conflict

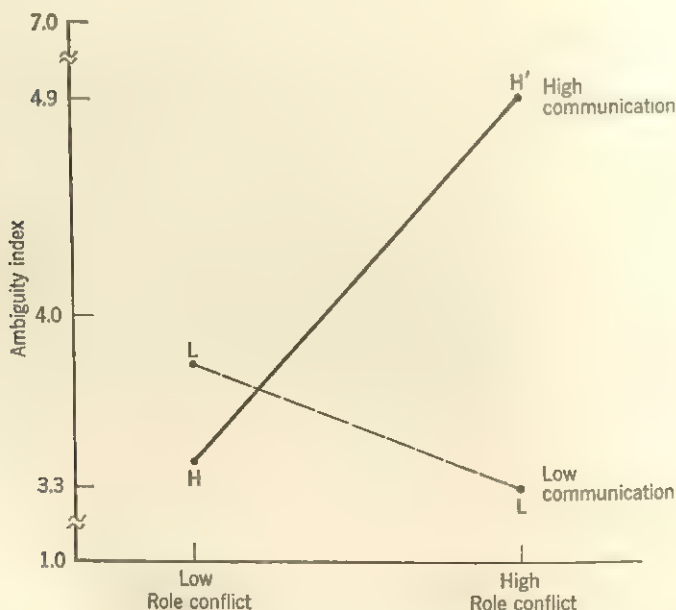


Figure 12-2. Mean ambiguity index scores in relation to role conflict and frequency of communication with role senders (from the intensive study). N : $H = 18$; $H' = 9$; $L = 7$; $L' = 18$. Comparison— H (3.4) vs. H' (4.9): $p < 0.05$; L (3.8) vs. L' (3.3): n.s.

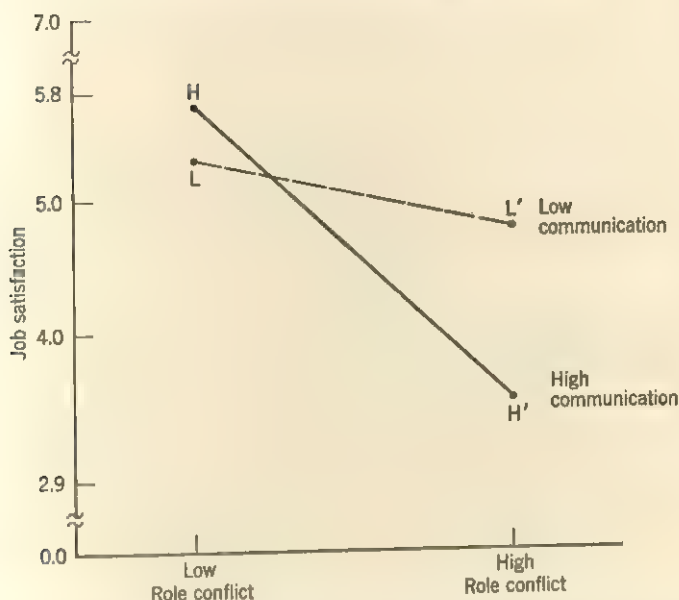


Figure 12-3. Mean job satisfaction in relation to role conflict and frequency of communication with role senders (from the intensive study). N : $H = 17$; $H' = 9$; $L = 6$; $L' = 17$. Comparison— H (5.7) vs. H' (3.5): $p < 0.01$; L (5.3) vs. L' (4.8): n.s.

produces in him a sense of futility on the job—a general lack of a sense of effectiveness in controlling his own fate.

Role conflict has been shown to result in a deterioration of bonds of trust, respect, and liking for one's role senders. But we should also expect such bonds to be strongest where the parties talk to each other frequently. What, then, is the relationship of communication to these kinds of affective relationships? Figure 12-5 * shows a pattern which is quite consistent with the findings presented above. High frequency of communication is associated with close interpersonal bonds when there is little conflict, but these bonds become severed when role conflicts are intense.

The evidence suggests that those coping tactics which involve a reduction in frequency of communication—withdrawal, rejection, evasion, and the like—are somewhat effective in protecting the person from some of the strains usually associated with severe role conflicts.

* The dependent variable in Fig. 12-5, affective interpersonal bonds, combines scores on trust, respect, and liking into a single index.

Enough people engage in them, and people do not tend to persist in the use of a coping mechanism (any more than in any other behavior) unless its use is somehow reinforced.

Two problems are inherent in coping in this way. Avoidance of others, at least on a broad and continued scale, separates one from the advantages as well as the strains of interpersonal life. In the extreme, protection from emotional turmoil is gained at the expense of social rewards; meaningful social relationships eventually give way to loneliness.

But short of this extreme, a second problem arises. To the extent that one must coordinate his efforts with others (as is so often the case in industrial organizations), avoidance of others is detrimental to satisfactory performance of interdependent jobs. Even if the focal person can tolerate the lack of coordination, even if his own performance does not suffer, others who are dependent on him cannot be expected to do without his information, advice, or service when they need it. They will either renew their role-sending efforts, increasing

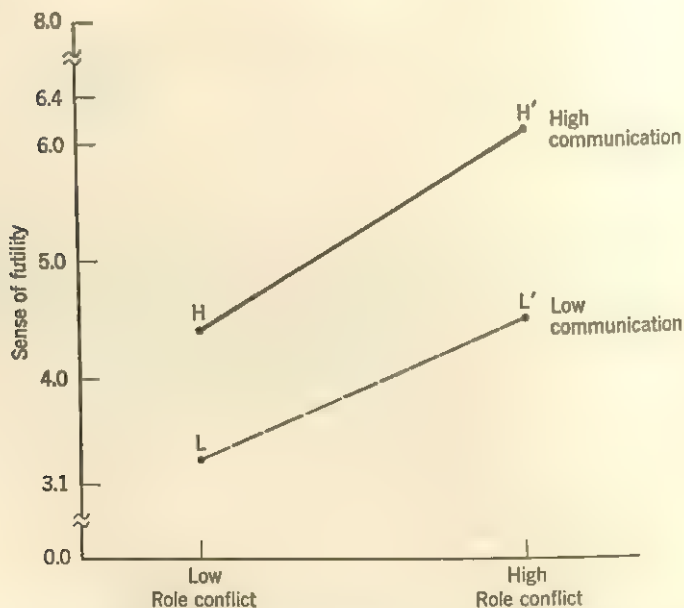


Figure 12-4. Mean sense of futility in relation to role conflict and frequency of communication with role senders (from the intensive study). N : $H = 17$; $H' = 8$; $L = 7$; $L' = 18$. Comparison— H (4.4) vs. H' (6.1): $p < 0.06$; L (3.3) vs. L' (4.5): $n.s.$

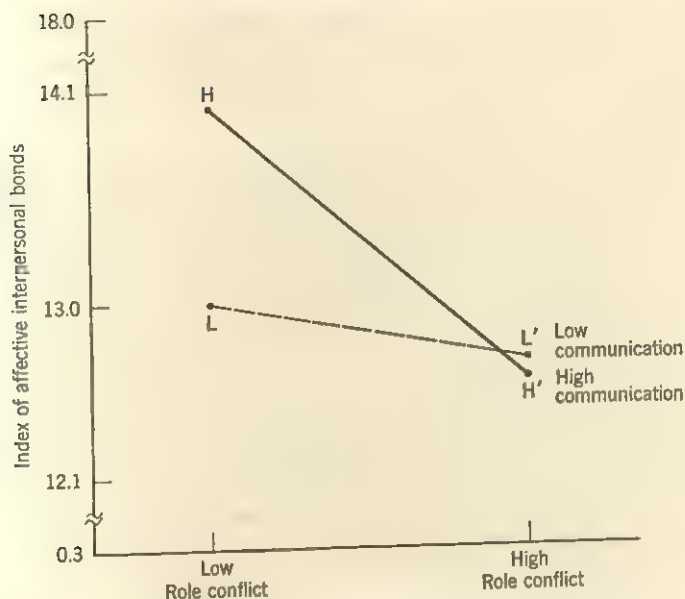


Figure 12-5. Mean index of affective interpersonal bonds scores in relation to role conflict and frequency of communication with role senders (from the intensive study). N : $H = 18$; $H' = 9$; $L = 7$; $L' = 18$. Comparison— H (14.0) vs. H' (12.6): $p < 0.04$; L (13.0) vs. L' (12.7): *n.s.*

the pressure, or they will take steps to remove him (or themselves) from the dependency relationship. The result is either an increase in the focal person's conflict or a decrease in his security. Although avoidance may be an effective coping device at the time, it is often self-defeating in the long run.

Functional Dependence and Reactions to Role Conflicts

In spite of the shortsightedness involved, the avoidance strategies are tenable in many cases of socially induced stress. But in two kinds of interpersonal situations they are generally untenable: (1) situations in which there is a high degree of functional interdependence between the person and the stress-inducing others, and (2) situations in which the stress inducers have a high magnitude of power. A person under severe role conflicts whose role senders are highly dependent on him and have high power over him is often a beaten man. He is bound

into the situation in ways which make withdrawal from or rejection of role senders impossible or unwise. Frequently, he must just take the consequences of the conflict. Let us consider separately the implications of these two conditions.

A situation in which there is a high degree of interdependence is one that requires continuous coordination of effort, and this implies a high frequency of communication. The focal person generally cannot cut off communicating without seriously undermining the effectiveness of job performance, a result intolerable in most organizations.

Role senders who are dependent on the focal person's performance are usually unrelenting in their pressures on him because diminishing the pressures would jeopardize their own job efficiency. Only role senders who are very highly dependent mitigate their pressures for fear of the consequences (Chapter 10). In general, the expectations and sent pressures of functionally dependent role senders are not easily abated; their personal investment in the performance of the focal person is too great for them to relax their pressures.

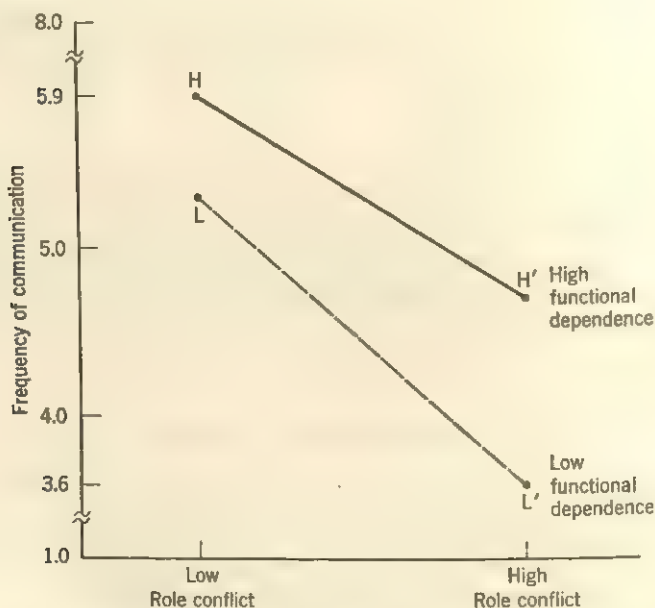


Figure 12-6. Mean frequency of communication with role senders in relation to role conflict and functional dependence of role senders on focal person (from the intensive study). N : $H = 16$; $H' = 9$; $L = 10$; $L' = 18$. Comparison H (5.9) vs. H' (4.7): $p < 0.02$; L (5.3) vs. L' (3.6) $p < 0.02$.

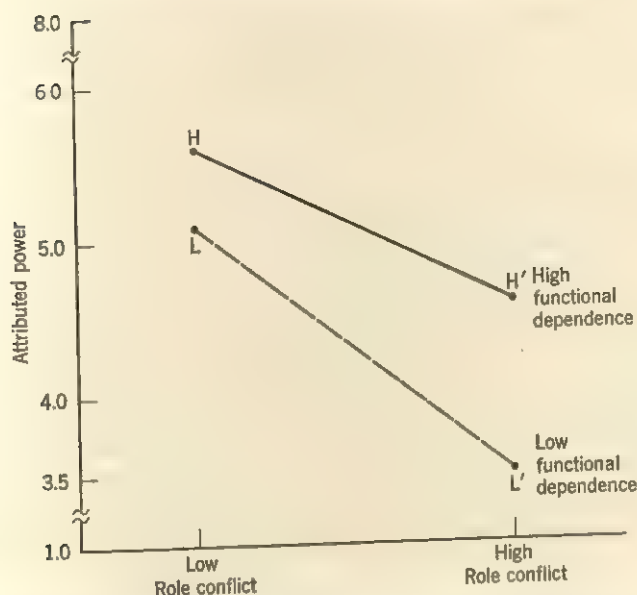


Figure 12-7. Mean power attributed to role senders in relation to role conflict and functional dependence of role senders on focal person (from the intensive study). *N*: H = 16; H' = 9; L = 10; L' = 18. Comparison—H (5.6) vs. H' (4.6): n.s.; L (5.1) vs. L' (3.5): $p < 0.01$.

Thus, under high functional dependence, the focal person's role senders cannot permit his withdrawal from them. Communication rates must be maintained in spite of the strain. Figure 12-6 supports this conclusion. Although conflict leads to a significant reduction in frequency of communication whether functional dependence of role senders on the focal person is high or low, the frequency of communication is significantly higher ($p < 0.05$) in high conflict-high dependence situations than in those typified by high conflict and low dependence.

Figure 12-7 shows a similar pattern for the degree of power attributed to role senders by the focal person. This is taken as an indication of the extent to which the focal person accepts or rejects his senders. A significant difference in attributed power for high versus low conflict is found when average functional dependence within the role set is low but not when it is high. Rejection of role senders, like withdrawal from them, seems not to be a common coping technique when role senders are highly dependent on the focal person.

If these techniques are not available, does this mean that persons who have highly dependent role senders are less successful in their coping efforts in general? To answer this question we turn to a variable coded from the intensive second interview with focal persons: degree of success the person seems to have had in coping with recent periods of stress. When role senders are highly dependent but impose little conflict, the focal person apparently copes well; when those dependent senders create high degrees of role conflict, his coping efforts are much less successful. When role senders are less dependent, the focal person is able to cope successfully (using avoidance techniques) whether the conflicts are strong or not (Fig. 12-8).

The person's inability to cope adequately with role conflicts when his role senders are highly dependent on him should lead to a variety of manifestations of strain; this is indeed the case. Given high functional dependence, role conflicts lead to intense inner conflict, dissatisfaction with the job, a general sense of futility, and weak affective interpersonal bonds (Figs. 12-9 through 12-12). The person is indeed

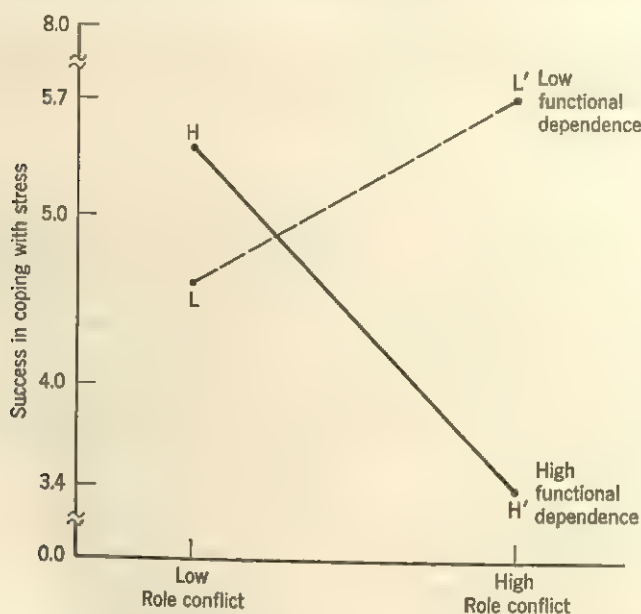


Figure 12-8. Mean success in coping with stress in relation to role conflict and functional dependence of role senders on focal person (from the intensive study). *N*: H = 15; H' = 8; L = 10; L' = 18. Comparison—H (5.4) vs. H' (3.4): $p < 0.01$; L (4.6) vs. L' (5.7): n.s.

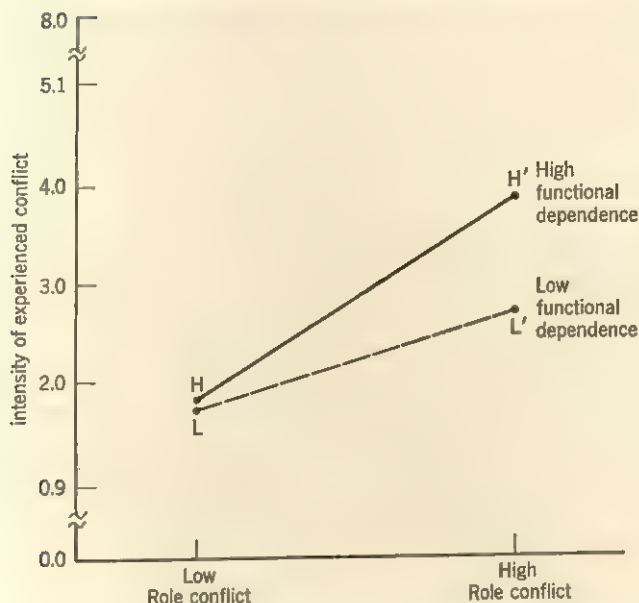


Figure 12-9. Mean intensity of experienced conflict in relation to role conflict and functional dependence of role senders on focal person (from the intensive study). N : $H = 13$; $H' = 8$; $L = 10$; $L' = 18$. Comparison— H (1.8) vs. H' (3.9): $p < 0.09$; L (1.7) vs. L' (2.7): n.s.

bound into the situation and suffers the consequences. When functional dependence of role senders is of lesser magnitude, the focal person is freer to cope (via avoidance) with the conflicting pressures they impose, thereby escaping some of the strains that he would otherwise experience.

The conclusion one might draw is that roles in which one's senders are highly dependent are dangerous and are to be avoided at all costs. No doubt many people in industrial organizations have come to just this conclusion, for in such roles one seems locked into constant association with his role senders, unable to ward off their pressures when they prove stressful. But this conclusion is not entirely warranted. Even though conflict leads to greater strain, given high dependence, the picture is not entirely gloomy. Severe role conflicts are less frequent under high than under moderate conditions of functional dependence ($p < 0.05$; see also Table 10-2 and related discussion). There are two factors which may account for this. First, one might expect that the more dependent role senders are, the more reluctant they are

to make things difficult for the focal person for fear of the consequences. Thus there may be a tendency to stop before things get too rough. This is not feasible, however, if the focal person's performance is vital to their own. If he cannot withdraw and they cannot back off, the situation becomes intolerable or they find another way around the conflict. In high interdependence situations greater efforts may be exerted toward solving the basic underlying problems. Moreover, the problem-solving process might often be a joint one with focal persons and role senders both participating. There is a hint of this in the positive correlation between the role sender's functional dependence and his willingness to go out of his way to help the focal person if he were having some sort of difficulty in his job ($p < 0.01$).

It is inappropriate, then, to view high dependency roles as generally stressful. They are less conflict-ridden than low dependency roles, and the members of high dependency role sets are usually quite willing to help the focal person over his difficulties. The coping procedures used in highly interdependent role sets may be more effective in the

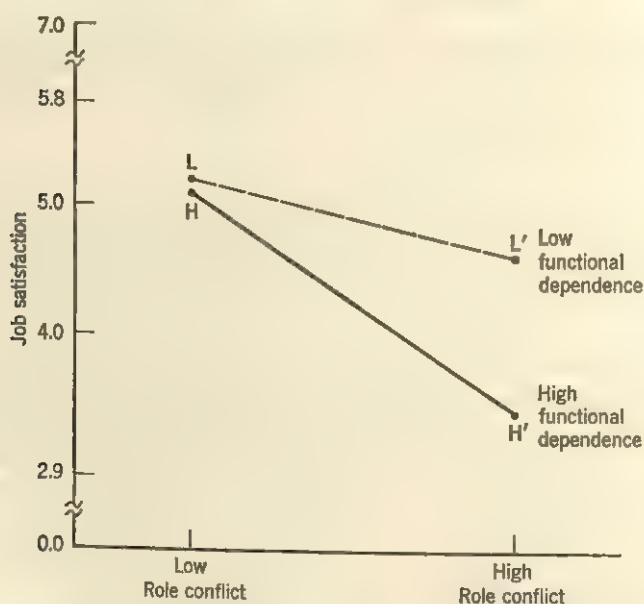


Figure 12-10. Mean job satisfaction in relation to role conflict and functional dependence of role senders on focal person (from the intensive study). N : $H = 13$; $H' = 9$; $L = 10$; $L' = 17$. Comparison— H (5.1) vs. H' (3.4): $p < 0.02$; L (5.2) vs. L' (4.6): n.s.

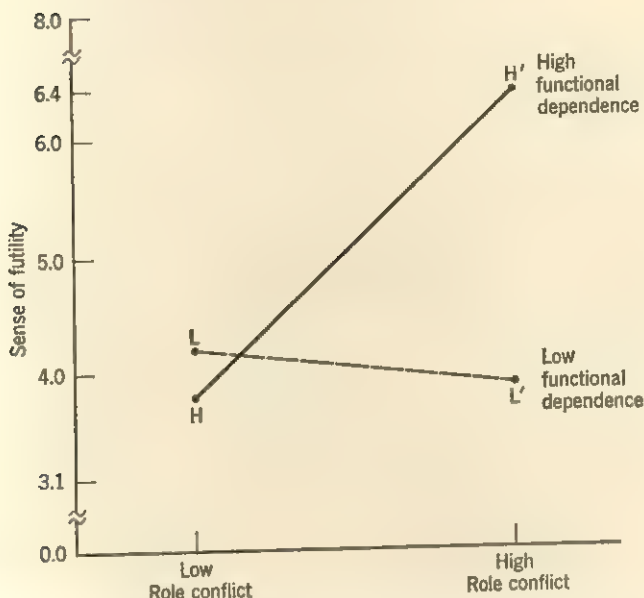


Figure 12-11. Mean sense of futility in relation to role conflict and functional dependence of role senders on focal person (from the intensive study). $N: H = 15; H' = 8; L = 10; L' = 17$. *Comparison*— H (3.8) vs. H' (6.4): $p < 0.01$; L (4.2) vs. L' (3.9): n.s.

long run than are the avoidance mechanisms available under conditions of low interdependence.

Power, Conflict, and Coping

If a person is locked in by the functional dependence of his role senders, he is equally locked when they have a great deal of power over him. When many members of the role set are highly dependent, their pressures tend to be unrelenting. When they have at their command the resources with which to control his behavior, their pressures are likely to be not only unrelenting but intense and conflict evoking as well. Figures 12-13 through 12-16 indicate the extent to which the power of one's role senders mediates the effects of objective role conflicts.

Figure 12-13 dramatically shows the intensification of the role conflict experience when the power of role senders is great. When role

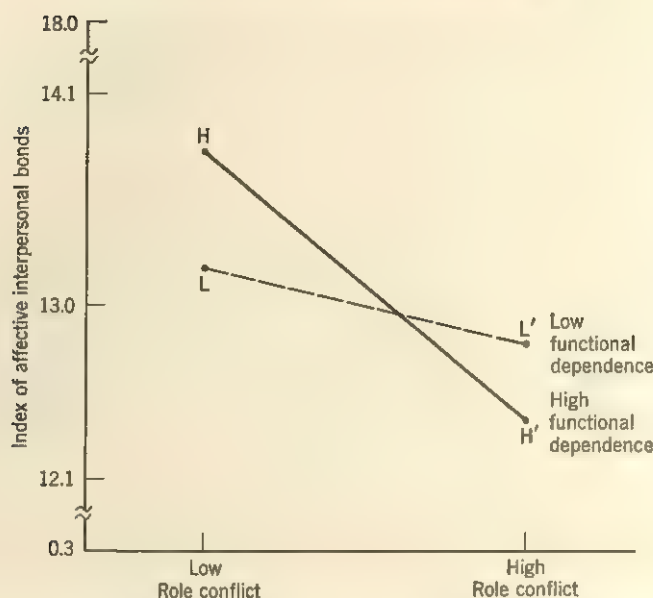


Figure 12-12. Mean index of affective interpersonal bonds scores in relation to role conflict and functional dependence of role senders on focal person (from the intensive study). *N*: H = 16; H' = 9; L = 10; L' = 18. *Comparison*—H (13.8) vs. H' (12.4): $p < 0.02$; L (13.2) vs. L' (12.8): n.s.

senders have only low power over the focal person, the fact that they are in objective conflict does not increase significantly his experienced conflict. When the power of role senders is high, however, the experienced conflict of the focal person increases sharply if there is objective conflict in the role set. The presence of a powerful set of role senders also restricts the range of coping behaviors available to the focal person. He cannot easily ignore, distort, or modify their demands—and get away with it. Coping means compliance. Past coping success as judged from interview materials is significantly lower ($p < 0.01$) when the average power of role senders is high than when the focal person is surrounded by role senders of lesser power.

When role senders are both dependent and powerful, the situation has about it the pall of hopelessness. The emotional reactions of focal persons to such binding situations reflect this hopelessness. Role conflict drastically reduces job satisfaction where role senders are very potent in influencing behavior (Fig. 12-14).

Conditions of high role conflict, generated by powerful role senders

who are dependent upon his performance, create for the focal person a general disenchantment with his job situation. But what additional affective forms does this disenchantment take? Tension is only a partial answer. The person subjected to high role conflict is not additionally tense and bothered if his role senders happen to be powerful or highly dependent upon him. These additional complications render him less bothered than beaten. "Beaten" has associated with it too many connotative meanings to be scientifically clear; nevertheless it seems appropriate. The beaten focal person gives up hope of altering or evading the immutable and powerful expectations which create his conflict, and falls instead into a state of a kind of hopeless psychological disengagement from his co-workers.

The hopelessness is reflected in the high degree of futility experienced on the job by people who are confronted with conflicting pressures from powerful senders (Fig. 12-15). The disengagement (in affective more than behavioral terms) is found in the weak state of affective interpersonal bonds in the high conflict-high power situa-

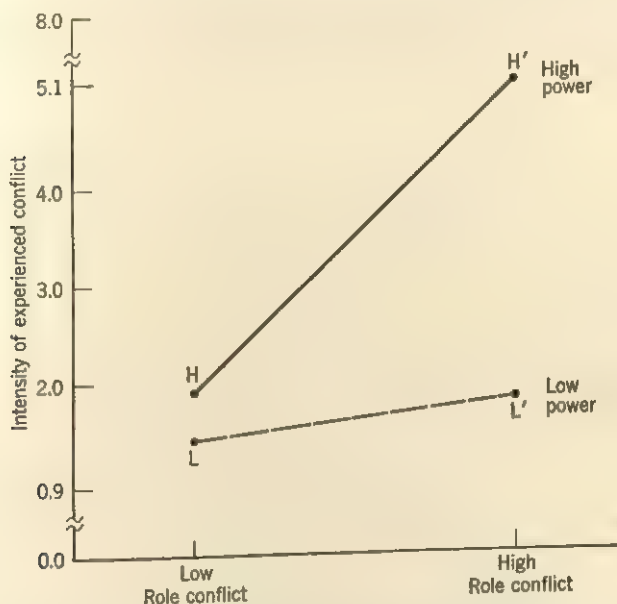


Figure 12-13. Mean intensity of experienced conflict in relation to role conflict and power of role senders (from the intensive study). N : $H = 14$; $H' = 10$; $L = 9$; $L' = 16$. *Comparison*— H (1.9) vs. H' (5.1): $p < 0.05$; L (1.4) vs. L' (1.8): n.s.

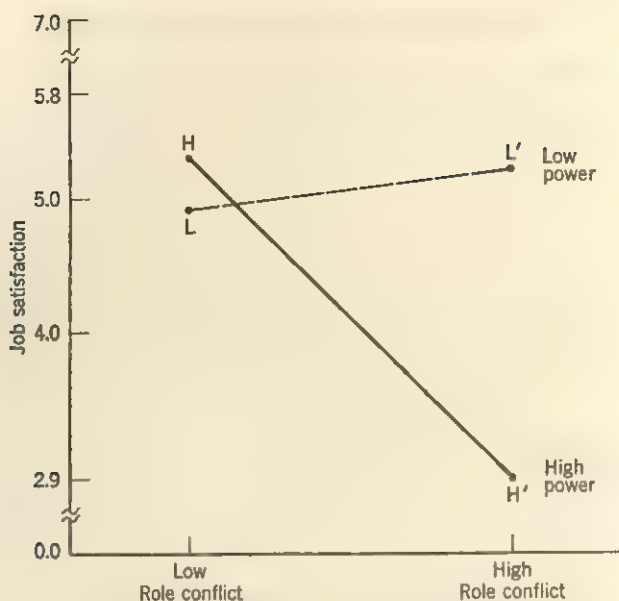


Figure 12-14. Mean job satisfaction in relation to role conflict and power of role senders (from the intensive study). N : $H = 13$; $H' = 11$; $L = 10$; $L' = 15$. Comparison— H (5.3) vs. H' (2.9): $p < 0.01$; L (4.9) vs. L' (5.2): n.s.

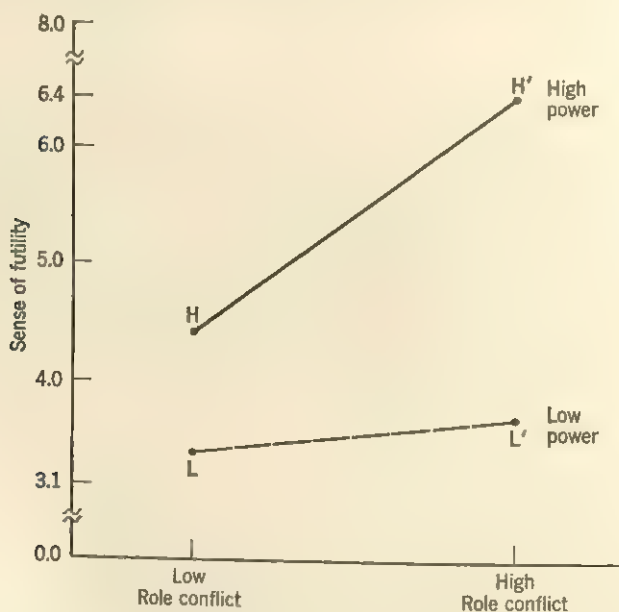


Figure 12-15. Mean sense of futility in relation to role conflict and power of role senders (from the intensive study). N : $H = 14$; $H' = 9$; $L = 11$; $L' = 16$. Comparison— H (4.4) vs. H' (6.4): $p < 0.05$; L (3.4) vs. L' (3.7): n.s.

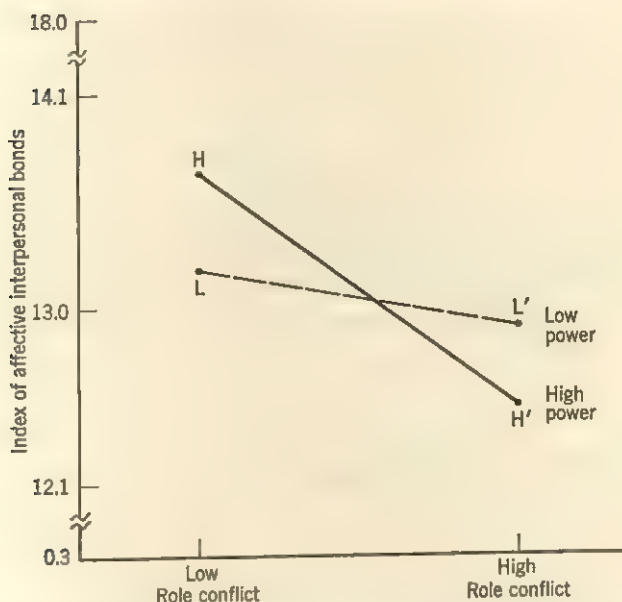


Figure 12-16. Mean index of affective interpersonal bonds scores in relation to role conflict and power of role senders (from the intensive study). N : $H = 15$; $H' = 11$; $L = 10$; $L' = 16$. *Comparison*— H (13.7) vs. H' (12.5): $p < 0.05$; L (13.2) vs. L' (12.9): n.s.

tion (Fig. 12-16). If one cannot withdraw physically from the pressures of powerful associates, at least he can withdraw psychologically.

Summary

Role relations of functional dependence and power bind the person into his role in ways satisfying when he is relatively free of conflict. But these role relations prohibit the use of avoidance responses which might protect him from the emotional strains of intense conflict. As a result the person whose role set is characterized by many members who depend highly on his performance or who have at their command the resources with which to influence him, exhibits a high intensity of inner conflict, low satisfaction with the job, a high degree of futility, and a kind of psychological withdrawal reflected in a weakening of affective interpersonal bonds.

The suggestion that the avoidance coping strategies—withdrawal, rejection, and evasion—may protect the person from the emotional

consequences of conflict is supported when one considers the mediating effects of frequency of communication with role senders. When communication rates are high, all these signs of strain are present in response to high conflict; when the focal person communicates less frequently with his senders, conflicting pressures from them lead to less severe inner conflicts and dissatisfactions.

The flaw in avoidance responses, however, is that low communication is associated with high probability of conflict. Withdrawal as a mechanism may generate more intensely the very conditions one tries to avoid. The short-range success of avoidance tends to be coupled with a long-range failure.

PART FIVE

Personality Processes *in Role Stress*

The major theme of this investigation has been that role conflict and role ambiguity constitute stress factors in the work environment, and that they produce many manifestations of inner conflict and tension. Inner turmoil, in turn, leads to various responses—some behavioral, some attitudinal—intended to help the individual find an adjustment to the stresses in his work role. Although some attempts at coping with these problems are successful wholly or in part, many of the more commonly observed responses to role conflict and ambiguity are costly to the organization, the individual, or to both.

Not all individuals are equally sensitive to such stresses, of course, nor does every individual respond to tensions in the same way. In the following chapters the focus of attention shifts to differences in the personalities of the focal persons in the intensive study, and to the reflection of personality differences in the varying responses of those individuals to role conflict and ambiguity. The introduction of per-

sonality factors serves to bring into better focus the dynamics of the adjustment process.

Chapter 13 discusses in general terms the place of personality variables in the study of role conflict and ambiguity. Subsequent chapters trace the implications of specific personality variables: neurotic anxiety (Chapter 14); introversion-extroversion (Chapter 15); flexibility-rigidity (Chapter 16); and achievement orientations (Chapter 17).

13

Personality and the Study of Stress

EARLIER in our examination of role conflict and ambiguity (Chapter 4) we discussed the cases of Foreman and Handler. Foreman was caught between the organizational requirement for increased production and the determination of the chief union steward to keep production down. Foreman's attempts to deal with this situation were complicated by his difficulty in controlling his own anger and by his fear of the steward, who threatened to prevent him from getting a nonsupervisory job when the next fluctuation in product demand reduced the number of supervisory positions. For Foreman, who had already "been broken four or five times" and "warned regarding tussles with the steward," the situation was scarcely bearable. He would readily have accepted either the high or the low production standard, if by so doing he could have escaped from the conflict.

Handler's situation has some basic elements in common with that of Foreman. Handler was charged with managing the movement and storage of materials at the lowest possible cost to the company. He found, however, that any of his proposals for improving the present procedures was persistently rejected. He was told in effect to do the job in the most economical way and at the same time to avoid any significant changes in the way the work had been done in the past. Handler suffers from the knowledge that he could make important improvements, if only he were permitted to do so. Like Foreman, he is a victim of conflicting and incompatible signals from the environment.

Foreman and Handler, however, experience pressures of conflicting

role expectations in markedly dissimilar ways. We cannot plausibly attribute these dissimilarities solely to objective differences in their jobs or in the specific form of their role conflict. We must also take into account differences in the personalities of the two men. For example, Foreman and Handler have different kinds of motivational involvements in their respective dilemmas. Foreman locates the source of conflicting pressures as outside himself; some of his associates encourage him to meet production standards, while others resist his efforts to do so. Handler, in spite of the discrepancy between the universally accepted cost-reducing goals of his department and his consistently rejected attempts to realize these goals, identifies the major source of his conflict in his strongly internalized occupational standards which demand a greater realization of performance goals than most of his role senders will tolerate. If Handler were able to abandon or relax his own standards, his feelings of anger and frustration would be considerably lessened.

If we were able to put Foreman into Handler's conflictual shoes, we would expect him to be less affected by the internal inconsistency of role sendings than is Handler, since Foreman's performance standards seem primarily dependent on externally imposed requirements and Handler's role senders are apparently willing to settle for minor improvements. On the other hand, if we were to speculate on Handler's reaction to the conflicting pressures under which Foreman labors as a production supervisor, we would not be surprised to find him experiencing strains at least as intense as Foreman suffers, but for somewhat different reasons. For the production foreman in this particular plant, the constant possibility of being demoted during periods of heavy layoff means that he hesitates to antagonize the union and the hourly workers, for fear that they might block his chances for regaining his position after a demotion. In effect he is deprived of the prime source of security upon which foremen in other situations can rely in attempts to resolve conflict: the knowledge that he could always side with and be protected by management in disputes with the union. Foreman's personal predicament is heightened because of the constant provocation to anger which he cannot express, not only for fear of reprisal but because of the guilt aroused in him by his own hostility. His inability to regard his anger as justified indignation contributes to his suppression of hostility. Handler might react more strongly and openly to the same situation because of his internalized standards for high performance. He would press the men to produce up to standard in spite of the possibility of losing his status by antagonizing the union.

Functions of Personality in Reactions to Role Conflict and Ambiguity

The conjectured exchange of roles between Foreman and Handler suggests the likelihood of important relationships between attributes of personality on the one hand, and the experience of and reaction to role conflict and ambiguity on the other. This assumption is, of course, inherent in the theoretical model presented in Chapter 2, relevant parts of which are reproduced in Fig. 13-1.

As the model suggests, a consideration of individual characteristics of the focal person is important for several reasons. First, they affect the expectations role senders hold toward the focal person and thus the kinds of pressures they exert on him (arrow 4). Some people elicit from their associates strong and conflicting role pressures, and their reactions to these pressures may serve to intensify them. Others perform their roles in ways which seldom evoke pressures of magnitude. Similarly, some people encourage and others discourage free and open communication with their role senders. One question, then, is what personality factors contribute to the creation of objective conflict or ambiguity, and how this stress-provoking process operates.

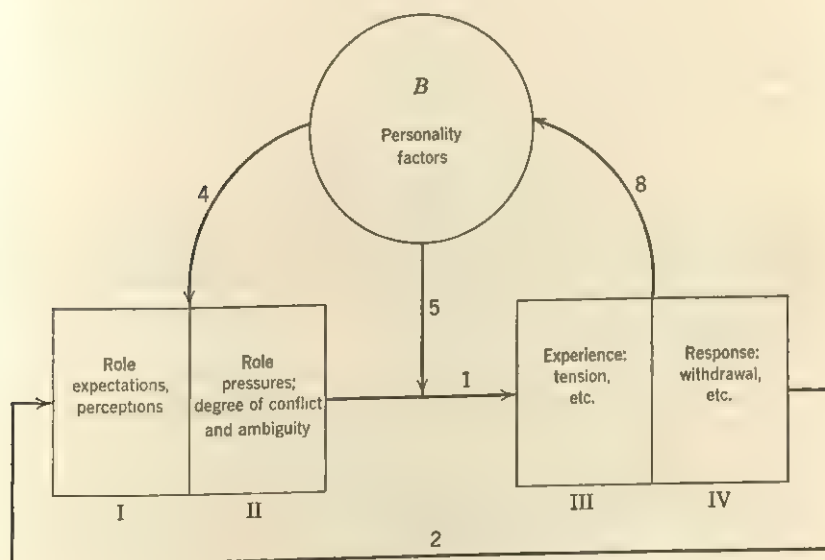


Figure 13-1. Partial model of factors involved in role conflict.

Second, personality variables also mediate the relationship between the sent role pressures and the person's experience of them, producing differential emotional reactions to stress (arrow 5). Some people are able to tolerate severely stressful conditions without visible signs of discomfort and with little disruption of their normal behavior. Others are overwhelmed with tension and anxiety when faced with relatively moderate levels of objective stress. It is important to identify individual differences in sensitivity to environmental pressures and events.

Third, personality factors lead to individual differences in the techniques used to cope with stress (arrow 5). In the face of tension-producing situations, some people tend to be problem oriented, that is, to deal with those aspects of the environment which create the stress. Others attempt to cope with the emotional experience itself rather than with the determinants of that experience. To the extent that the stress is produced by the behavior of other persons, as in role conflicts, efforts to cope with the stress are apt to have interpersonal consequences. For example, we have seen (Chapter 4) that the effectiveness of social interaction and the strength of interpersonal bonds deteriorate in conflict situations. These consequences are more pronounced for some individuals than for others.

Finally, we believe that the nature of one's experience in a role and the behaviors elicited and reinforced thereby can lead to changes in personal attributes. We assume, however, that such changes in personality take place over relatively long periods of time. Evidence for these processes (arrow 8) is fragmentary and will not be treated in detail.

But let us consider the other three processes more completely.

Personality as Stimulus for Role Pressures

Different people are perceived differently by others. Some people seem constantly to provoke their associates to hostility and aggression; others elicit sympathy and supportive responses. Consider the case of Middle Management Man,* an extremely ambitious, energetic, mobility-oriented person. A lazy but alert superior might evade some of his own responsibilities by delegating them to Middle Management Man, who probably would accept them with alacrity. But another superior might feel that his status was threatened by the presence of this "young man on the make" and might block his efforts at achievement. In his frenzy to get ahead, Middle Management Man tends to step on the toes (if not on the shoulders) of his colleagues and sub-

* This case is treated at greater length in Chapter 17.

ordinates. To the extent that they are offended by this behavior, they are likely to exert counterpressures to keep him in bounds. A more relaxed and considerate person might be liked and accepted by the same set of role senders and might therefore receive from them few pressures toward change. The strength of the person's mobility aspirations thus may determine the degree of conflict he confronts.

The nature of the responsibilities delegated to a person also depends in part on his reactions to certain kinds of role requirements. If he were a highly flexible person, and generally tolerant of ambiguity, his colleagues might shunt onto him almost any kind of task. If, on the other hand, he were somewhat rigid, he might be given only those tasks which his senders felt were likely to fit his interests. This process of mutual selection in the assignment and acceptance of role expectation suggests that individual differences function to inhibit certain kinds of role sendings as well as to elicit them.

In sum, the dynamics of conflict and ambiguity must be considered within the framework of the contributions the focal person himself makes toward creating these environmental conditions.

Differences in Sensitivity to Environmental Events

The concept of stress tolerance has analogous meanings for buildings and for persons. In either case it refers to the ability to withstand force or pressure without breakdown or malfunction. Some persons are better equipped to handle stress than others.

Several models of stress tolerance might be considered. The first and simplest is a linear model, shown in Fig. 13-2(a). This model would hold that the magnitude of strain (e.g., tension, anxiety) is a direct function of the degree of stress to which the person is subjected; from zero upward indefinitely the greater the stress, the greater the manifestation of strain. Individual differences would be reflected in the linear model by differences in slope, with a steep gradient showing less stress tolerance than a gently sloping gradient. Person *A* in Fig. 13-2(a) obviously is more sensitive to stress than is person *B*.

The linear model can be further refined if individual differences in level of strain at the origin are recognized, as shown in Fig. 13-2(b). Here degree of stress tolerance is less easily identified. Persons *D* and *F* are obviously more sensitive to mild degrees of stress than are *C* and *E*. But *F* is the most and *C* the least well equipped to handle high degrees of stress. Person *F* is relatively unaffected by variations in stress, but nonetheless experiences some strain.

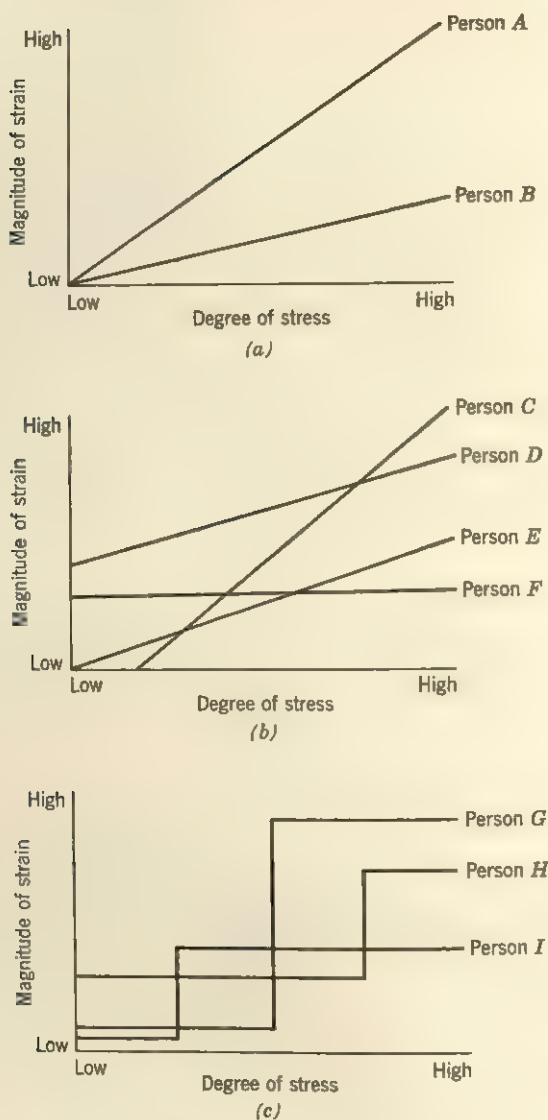


Figure 13-2. Alternative models of stress tolerance: (a) the simplest linear model; (b) the differential linear model; (c) the threshold model.

For example, Middle Management Man portrays himself as impervious to the pressures and conflicts that many others would regard as highly stressful. Although members of his role set are exerting considerable pressure on him to modify his behavior, he seems to be insensitive to the critical implications of these pressures. He does not, however, deny that he is under pressure. From his beginnings in a low-status production job in the company, this young executive has striven intensely, spending almost as many hours in overtime as he does during regular working periods, seeking additional responsibilities whenever the opportunity arises and consequently encountering greater pressures. Person *F* in Fig. 13-2(*b*) perhaps comes nearest to Middle Management Man.

Figure 13-2(*c*) represents a quite different model in which the manifestation of strain is governed by a threshold phenomenon. There are individual differences in the degree of stress required to trigger a strain response, but the magnitude of strain when produced is determined by factors other than the stress.

Two common assumptions are represented by a threshold model: that every man has his breaking point, and that the seeds of emotional disorder are in the person (predisposing factors), while the environmental stress constitutes only a precipitating event. Determination of stress tolerance is difficult in this model also. If it is determined by the threshold point, person *I* has the lowest and *H* the highest tolerance. But *I* is most able to survive severe stress, and *H* handles mild stress less well than the others.

The available evidence on psychological stress gives some support for both the linear and threshold models and does not provide an adequate basis for choosing between them. There is ample evidence that people express more violent emotional upheavals and resort to more drastic defensive maneuvers under very high stress than under more moderate levels. On the other hand, observations of people under stress also reveal something of the threshold effect.

Neither the linear nor the threshold model seems sufficient to explain the complexities of stress and strain in social structure. Moreover, in all of the models discussed thus far both stress and strain are treated as unitary dimensions. This is far from reality. There are many qualitatively different sources of environmental stress. Several kinds of conflict and several conditions of ambiguity have been identified as stressful in earlier chapters, and no doubt there are individual differences in sensitivity to each of them.

Rather than a general conception of stress tolerance, an adequate theoretical treatment requires recognition of the fact that for each

person there is a somewhat idiosyncratic set of stressors to which he is sensitive. One man's stress can be another man's source of satisfaction. Thus on the two-dimensional charts in Fig. 13-2, each person would be represented more appropriately by a family of curves, each curve being based on a different source of stress. Motivational factors are likely to be important in determining the specific environmental conditions and hence the specific stressors to which an individual is sensitive.

Just as individuals differ in the conditions which produce strain for them, there are individual differences in the experience and expression of strain. Propensities for experiencing such emotions as anxiety, anger, guilt, self-hatred, futility, and apathy, as well as elation and satisfaction, differ from person to person. Under stress some people cry, others bite their lips, and still others lash out in verbal or physical attacks. Moreover, the particular reaction for a given person varies from one stress condition to another. In more extreme cases some people develop ulcers or heart attacks while others are more prone to psychotic breakdown. Manifestations of strain may be as highly individual and personal as are the environmental circumstances which bring them about.

In summary, there are ample reasons for considering individual differences in sensitivity to stressful conditions in the environment. However, a simple notion of stress tolerance is not likely to carry us very far. Variations are many and complex, and many aspects or dimensions of personality are apt to be involved.

Individual Differences in Coping Behavior

Some of the complexities just reviewed can be taken account of by combining the linear and threshold models of sensitivity to stress. The merging of the two models or, more appropriately, the introduction of threshold notions into the linear model might be based on two considerations. First, as with all sensory processes, there are levels of environmental stress which are subliminal and therefore do not affect the person.* Thus the stress-strain relation begins not from zero stress

* According to some definitions this would be impossible; a stimulus condition or event would not constitute stress unless and until it produces detectable effects, i.e., strain. But by this conception stress-strain relations have no meaning; degree of stress is measured by magnitude of strain. A more fruitful theoretical approach, it seems to us, would involve independent conceptual and operational definitions of stress and strain. The design of the intensive study was based on this orientation.

but from some level above zero, a threshold. Second, higher-level thresholds may be created by the operation and failure of coping mechanisms. Reference to Fig. 13-3 may help make this clear.

In Fig. 13-3 (a hypothetical case), point *a* on the stress dimension represents the lower threshold; signs of strain are not evident below that point. From point *a* to *b* increasing amounts of stress create higher magnitudes of strain (e.g., anxiety), but at point *b* the person copes with the stress relatively effectively by the use of some defense mechanism (e.g., denial). For stress as intense as point *c*, the defense fails or proves inadequate and what appears to be a second threshold occurs; the person is suddenly overwhelmed with anxiety. At point *d* a new coping procedure (e.g., leaving the situation) is introduced, once again reducing the strain. The dotted line in Fig. 13-3 represents the hypothetical level of strain which would be produced if coping procedures were not used, and something close to linearity might be assumed. According to this more complex model, sharp discontinuities in manifestations of strain are the result of the breakdown of defenses.

In this model, a separate curve is needed not only for each stressor and strain manifestation but also for each coping defense or set of defenses. Here again several aspects of the model are likely to involve individual differences and might be used to represent the person's degree of stress tolerance: the degree of stress which is his true lower threshold (point *a*); the gradient of the hypothetical (i.e., defense-absent) stress-strain curve; the point (or points) at which coping mechanisms are introduced (point *b* or *d*); the effectiveness of the

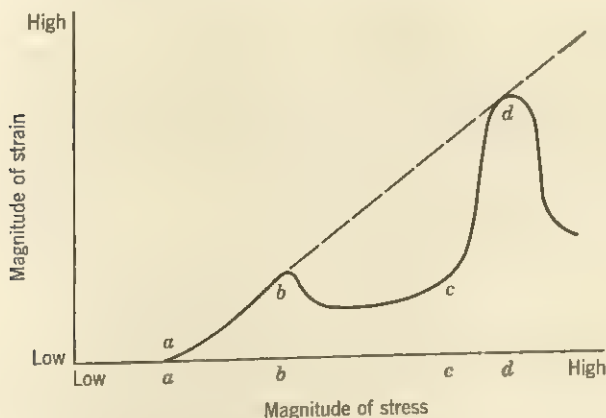


Figure 13-3. Defense-failure model of stress tolerance.

defense in reducing the magnitude of strain; and the point at which the preferred defense fails (point *c*). The concept of stress tolerance takes on new complexities.

An additional and extremely important concept is introduced in this model: the concept of coping with stress. Unlike physical structures, persons can and do respond to stress in ways that reduce either the stress or the resulting strains. It is more appropriate to regard people as active agents than as passive victims in stressful situations.

The person who confronts an environmental stress may be viewed as having three interrelated tasks to accomplish: (1) to deal with the objective situation so as to reduce or eliminate its stressful characteristics, that is, to resolve the core problem, (2) to deal with the tension and negative emotions which the stress arouses in him, and (3) to deal with secondary or derivative problems which may be created by his efforts to cope with the stress or its emotional consequences. Let us look at each of these more closely.

Coping with the Core Problem. A wide variety of objective problems may be stressful for any given person, and typically there are many factors or forces which contribute to the stressfulness of any given situation. We discussed in Chapter 4 the extremely varied and highly personal nature of role conflicts: that contradictory pressures from the environment produce psychological conflicts in the person; that the needs, values, and capabilities of the person as well as the environmental pressures contribute to the conflict; and that conflict is generated for the most part by pressures away from the status quo. In Chapter 5 we saw that the nature of role ambiguity is similarly varied and personal. Any stress situation is a joint product of environmental and personal factors.

Coping with the core problem may involve changing any combination of these factors. Solutions may be found by alterations in environmental pressures, barriers, resources, procedures, and the like. Or solutions may come from motivational or cognitive changes in the person. These might include shifting one's level of aspiration, reducing ego involvement in the job, finding alternative channels of gratification, or developing new standards of behavior. Changes in the individual may also involve the learning of new skills and procedures which increase his capacity to conform to role expectations.

Coping mechanisms which involve any of these kinds of intra-individual changes have the character of accommodating the person to the demands of his environment. The adjustment process is typically conceived in these terms. The well-adjusted person is often seen as

one who can readily fit himself to the external realities of life. This is the usual goal of training and therapy.

The adjustment process is less often viewed in terms of changing those external realities, of accommodating the environment to the person. It is important, in our view, to consider coping procedures which involve environmental changes. The case of Foreman (Chapter 4) exemplified efforts to cope with stress by trying to bring about changes in external conditions. Foreman dealt with his conflict (between pressures from superiors for more production and pressures from steward and subordinates for a more relaxed pace) by siding with his superiors and increasing the pressures he exerted on his men for more production.

Many other examples of environmentally oriented coping techniques can be found. A counterattack in response to pressures from others may be effective in reducing those pressures. Requests for additional resources or for changes in regulations, organizational structure, or division of responsibilities may be invoked in times of stress. Seeking more information from others or clarification in incoming information is the obvious coping mechanism for problems of ambiguity.

Changes in person-environment relations are also involved in coping behavior. Horney (1937) points out the fruitfulness of grouping mechanisms into three categories: moving toward, moving against, and moving away from the environment. The approach-avoidance dimension in relation to interpersonal behavior in conflict situations is particularly important. When faced with a conflict between role senders, one technique would be to increase the frequency of contacts with senders, seeking to resolve the conflict through compromise or improved coordination. However, in such situations many individuals attempt the reverse; they diminish the frequency of their contacts with associates as though they were trying to resolve the conflict by limiting their receptivity to sent role pressures. In some cases the reduction in contacts is accomplished through a relatively passive process of withdrawal and evasion; in others, an active and persistent rejection of associates is involved.

The approach-avoidance dimension may also be applied to the acceptance of responsibility. Often a conflict of role pressures results when some role senders urge the focal person to produce more or to perform additional tasks. A person might ignore the sendings or delay acting on them, provided that the senders could not actually enforce their requests. However, many focal persons in our sample reacted to this sort of situation by accepting the new sendings and by taking on new and greater responsibilities. The resolution of con-

flict through the acceptance of additional responsibility may be viewed as a general style of coping for some individuals, but the consequences of a particular individual's typical use of such a style may not be completely understood without reference to other aspects of his personality. For example, a person who cannot say no because he wants everyone to like him might soon find himself overwhelmed by the additional pressures he accepts, whereas an astute and opportunistic individual might hew a path to promotion through selective nay-saying and judicious acceptance of additional responsibility.

Coping with Emotional Consequences of Stress. Moderate levels of tension and other negative emotions sometimes perform important functions. A person may first become aware that a problem requires attention when he feels the tension building up. The psychoanalytic concept of signal anxiety reflects this notion. Tension at a moderate level is also an energizer, increasing motivation for productive work. A common suggestion in some managerial circles is to keep subordinates "a little hungry" so that they will strive a little harder. There may be some qualified truth in this view, but the qualifications are important. More intense emotions may interfere with productive work. Attention is frequently turned away from the problem and toward the emotion itself. Responses tend to become diffuse and uncoordinated. From the person's perspective, the emotion is the problem.

Anxiety and hostility are two of the most common affective reactions to stress, but the range of techniques available for coping with these feelings varies widely. Some people express their hostility directly toward the person at whom they are angry, with effects ranging from a constructive clearing of the air to an irreversible exacerbation of the conflict. Other persons seem to be able to get the anger out of their systems only by withdrawing from the situation or, as Foreman does, by containing themselves until going home and then allowing the anger to spill out into quarrels with the family.

Individuals differ also in the extent to which they are conscious and accepting of their hostile and anxious reactions. One of the focal persons in the intensive study impressed an interviewer by his unusual calm and poise as he described very stressful incidents; he denied experiencing much tension and anger, but revealed on further questioning a history of gastrointestinal disturbances which seemed to be set off by these incidents. The mechanism of denial to relieve anxiety is not always unconscious; one respondent stated that he always made a conscious effort to focus his attention away from anxiety when it threatened to become too great. He accomplished this through fantasy; he typically would imagine himself on vacation, fishing or playing

golf, alone, serene, and in complete control of the situation. He would dote on each detail of the fantasy, almost as though he were running it through a projector at slow motion, until finally he succeeded in driving away awareness of his anxiety. In other cases hostility seems to be diminished through the use of projection, by attributing the anger or the cause of the anger to other persons. In this way, for example, anger which threatens the individual through the arousal of guilt may be more safely experienced as righteous indignation at the sins of others.

In addition to the variety of internal defense mechanisms used to cope with anxiety, hostility, and guilt (mechanisms such as repression, isolation, projection, displacement, turning-against-the-self, and fantasy), many people turn to such other devices as alcohol, barbiturates, and self-indulgence in sensory pleasures. Lengthening the cocktail hour during periods of stress is the executive's counterpart to the foreman's stopping at a bar on the way home and "belting a few."

Success in reducing emotional tension does not imply success in coping with the core problem, nor is the reverse true. A person who somaticizes his hostility, who denies his feelings, or who kicks his dog instead of his supervisor, may be able to cope adequately with the objective conflict of role pressure even though he has not adequately coped with whatever emotional conflict has been engendered in him. The stereotype of the successful though ulcerous executive illustrates this point, and testifies to the importance of distinguishing between the two classes of problems.

The Problem of Derivative Problems. The arousal of intense, potentially debilitating emotions is a derivative problem which grows out of and is part of the experience of stress; to the core problem is added a secondary problem. But the person's defensive reaction to either of these often creates still other problems.

The dangers inherent in a hostile counterattack are obvious, but even a milder rejection of others, if persistent, may destroy the possibility of enlisting their aid in the future. In substantially interdependent situations withdrawal from role senders frequently provokes them to increase their pressures, thereby re-creating in greater strength the problem with which the person was attempting to cope. Either moving against or moving away from role senders is apt to be displeasing or completely unacceptable for them. Interpersonal problems less frequently result from moving toward others except where role senders may resent a person who clings to them in dependency, restricting their autonomy.

Projection of hostility onto others not only does them an injustice,

but also makes easier guilt-free aggression against them. If they retaliate, the situation will be more stressful but the projection is justified. Displacement (e.g., taking out one's job-induced hostility on one's wife) is another defense mechanism well calculated to produce additional problems; an unhappy home offers little consolation at the end of a troubled day. Adding misplaced aggression to lack of companionship makes many an office widow into a divorcee.

Defenses involving internal motivational and cognitive changes often produce derivative problems also. Reduction in level of aspiration may be realistic but often results in a curtailment of self-actualization; the person may no longer make full use of his skills and talents.

Such defenses as denial and repression, which involve distortions of reality, not only undermine the person's ability to find objective solutions to his core problem, but also (to the extent that he is unaware of factors and forces in the situation) make him less able to anticipate and resolve additional problems.

The balance sheet is by no means all negative, however. Most coping procedures are constructive to some degree. Not all of them result in derivative problems, and even those which do generally produce some gains as well. They are repeated precisely because they do so. However, coping with stress and its associated emotional states always involves some cost to the person, if only in time and energy. In many cases, because of the derivative problems created by coping behavior, the costs are very great.

The Measurement of Individual Differences

We have argued that individual characteristics play a major part in the dynamics of adjustment to role conflict and ambiguity. They also contribute significantly to the generation of environmental stress. Emotional reactions to stress are largely controlled by personal attributes, and the mechanisms available for coping with the stress and its emotional consequences are well rooted in properties of personality. Moreover, the creation of derivative problems is dependent in part on individual factors.

Individual differences, while highly significant, are also extremely varied and complex. The notion of a simple dimension of stress tolerance is inadequate. Much is known about the nature of individual differences and personal psychodynamics, but a systematic and comprehensive theory of personality awaits further development. Pro-

cedures for quantitative measurement of personal attributes also are in a state of relative infancy. Among the conceptual and methodological problems in the area of personality, several are particularly relevant to understanding the strains generated by occupational roles: reaction versus predisposition, temporary states versus enduring characteristics, conceptual simplicity versus complexity, and self-report versus other forms of data.

Reactive versus Predisposing Factors

Much of the research on individual differences has focused on the tendency for people to react differentially to various situations. Environmental conditions are seen as eliciting various kinds of cognitive, emotional, and behavioral responses, but responses will differ from person to person for any given environmental situation. The reactive function of personality also reflects differences in alertness and sensitivity to various external circumstances.

On the other hand, research on motivation is predicated on the assumption that the person is a striving, driving, goal-directed agent who *actively* seeks out certain environments and works to change others rather than merely waiting for the environment to do something to him. The distinction is illustrated by colloquial expressions: "He becomes angry when insulted," as contrasted to "He goes around looking for a fight." The language of motives is generally quite different from the language of traits. Yet, motivations and sensitivities, predispositions and reaction patterns are undoubtedly related. Neither the distinction nor the integration of these is well reflected in present techniques of assessment.

States versus Enduring Characteristics

Although an individual responds differently from one time to another, even in similar situations, there are also major continuities in his behavior. The fact that a person is said to act "out of character" reflects the notion that he has behavior patterns which are "in character." Temporary experiences and incidental responses must be distinguished from typical and recurrent reaction patterns. This difference is made more obscure by the frequency with which enduring traits are given behavioral or state-descriptive names. Acute anxiety attacks may be common experiences for an "anxious person," but even the most stable person may at some time react with intense anxiety.

Personality tests are generally constructed to measure typical, modal, relatively situation-free response patterns that recur over time, but there is considerable evidence that scores on such traits can be raised and lowered experimentally. Adequate studies of stability of personal characteristics over time are few and far between. It is therefore difficult to determine to what extent a score on a personality scale represents a current (possibly nonrecurring) state or a relatively enduring set of reactions.

The assessment of motivation involves a similar problem. Although it is appropriate to speak of a person as having a strong need for achievement or sex drive, such motives are of course not always active. However motivation is conceptualized, variations in arousal and satiation must be recognized. Thus when measurement occurs at a single point in time, the probability that a person will be assessed as strong or weak on a given motive will depend heavily on whether at that time the motive is aroused or quiescent. For example, a person's need for status or recognition is more apt to be prominent just before than just after a promotion.

In the following chapters, standardized personality scales are generally assumed to be measures of enduring characteristics of the person. Though with less confidence, a similar assumption is made regarding the assessment of motives. However, it is important to recognize the possibility that these properties (and thus the score) are temporarily induced by the situation and even that enduring traits are altered by an individual's experience in the situation.

Conceptual Simplicity versus Complexity

Parsimony and explanatory power are basic virtues in the development of scientific theory, but are often at odds with one another. Much of this chapter has been devoted to the need for more complex and realistic distinctions regarding personal characteristics. However, things soon get out of hand if the process of differentiation goes on unrestricted; the conceptual system becomes more elaborate and complex than we are able to grasp, much less work with analytically. Here, as in all fields, we are unable to deal with the full complexity of reality.

From the infinite ways in which people differ, basic dimensions must be abstracted. But this is the dilemma. The dimensions basic for various purposes often are not known in advance. Characterizing the person in terms of his position on a limited set of dimensions facilitates analysis at the possible cost of understanding fully the dynamics of his particular case.

The choice between conceptual and mensurative simplicity versus richness of detail is never easy. It is all the more difficult given the exploratory nature of the present research. Many of the results presented in the following chapters are based on a statistical analysis involving a relatively small number of personality dimensions or variables; in Chapter 18, however, we turn to an analysis of six cases, covering a much wider range of information about the person and his situation.

Self-Insight and Interpretation

An additional problem in personality assessment derives from the fact that people frequently lack insight into their own personal dynamics. They are often poor reporters regarding their own personalities, in spite of persistent self-observation, because of distortions in self-perception and in the reporting process. Moreover, common language descriptions of personal characteristics frequently fail to identify the genotypic dimensions of importance in systematic research. Since the person is unaware of some aspects of his personality, since his defenses do not permit accurate reports on other aspects, and since he lacks an adequate conceptual language, his self-descriptions can hardly be taken at face value. Rather, a process of interpretation is required, based on other things known about the person or on known correlates of such material for people in general. The conversion of raw data into conceptual variables, in this field as in many others, is often complex and imprecise. Problems of validity and reliability are inherent in the interpretation process as in the collection of raw data. The use of standardized objective personality inventories makes such difficulties somewhat less acute, but they cannot be escaped.

The present investigation contributes relatively little to the resolution of any of these four problems. It utilizes an eclectic approach to the measurement of personality variables. A variety of analytic and interpretive techniques were introduced to overcome some of the dilemmas described above and to increase confidence in the evaluation of the results. Two general techniques of personality assessment were used: previously standardized tests and inventories based for the most part on fixed-alternative, self-descriptive questions; and interpretive assessments based on content analysis of protocols from the long, open-ended second focal interviews. Liberal use of materials from the second interview with the focal person has been made in earlier chapters; the next three chapters will deal with variables obtained from standardized personality measures.

*Personality Dimensions Derived
from Standardized Questionnaires*

Each focal person in the intensive study completed a broad battery of objective personality tests containing a total of 323 items and 25 scales scores. They were drawn from the Minnesota Multiphasic Personality Inventory (MMPI), the California Personality Inventory (CPI), Cattell's IPAT anxiety test and 16 Personality Factor Questionnaire (16PF), the Cornell Medical Index (CMI), the Bernreuter Personality Inventory, and from previous work at the Institute for Social Research (ISR). The selection of specific scales was based on their assumed relevance to problems of role conflict and ambiguity, to patterns of interpersonal relations, or to the compatibility of personality with occupational role requirements. No attempt was made to sample the entire domain of personality traits.

Some of these scales were intended to measure various aspects of the same patterns of behavior, and were in fact substantially intercorrelated. In order to reduce redundancy and to discover the basic dimensions being tapped by the tests, a factor analysis of the intercorrelations among the total scale scores was conducted. Six factors, accounting for 99 per cent of the common factor variance, were extracted from the intercorrelation matrix by the principal axes method. These factors were then blindly machine rotated by the Varimax criterion (Kaiser, 1958). The six factors thus obtained are presented in full in Appendix N. Table 13-1 gives the loadings of the major identifying scales for the first five of these rotated factors.

Given the limitations of the component tests and the limited representativeness of the sample, one can hardly assume that these factors represent the basic dimensions of human behavior. The factor analytic technique is viewed primarily (though somewhat conservatively) as a means of data reduction and simplification. Because of the multidimensional nature of the material, factor analysis was useful in revealing and summarizing the complex interrelations among variables.

Factor I: Neurotic Anxiety versus Emotional Stability

Factor I is clearly a neuroticism factor. Its constituent measures are composed of items referring to physical and psychological manifestations of anxiety, particularly neurasthenia, depression, hypersensitivity, and lack of self-confidence. This factor bears a marked resemblance to one which French (1953), in his comparisons of 450 factors derived

*Table 13-1 Personality Factors Derived from Self-Descriptive Questionnaires*¹ (from the intensive study, *N* = 53)

<i>Factor</i>	<i>Factor Loading</i>
Factor I. Neurotic Anxiety vs. Emotional Stability	
Total anxiety (IPAT)	.90
Guilt proneness or free floating anxiety (IPAT-O)	.77
Inner conflict and tension; ergic or drive tension (IPAT-Q4)	.74
Lassitude malaise; depression, neurasthenia (MMPI)	.73
(Lack of) Self-sentiment control or will power (IPAT-Q3)	-.51
Neuroticism (Bernreuter F1)	.48
Physiological correlates of anxiety (CMI-Gurin)	.43
(De)surgency (16PF-F)	-.37
Factor II. Favorable vs. Unfavorable Expressed Self-Regard	
Self control (CPI)	.78
Probable distortion or lie scale (ISR, project staff)	.73
Responsibility (CPI)	.55
(Lack of) Unhappy childhood (ISR, project staff)	-.49
Ego strength (IPAT-C)	.46
Self-sentiment control or will power (IPAT-Q3)	.45
Tolerance (CPI)	.41
Factor III. Flexibility vs. Rigidity	
Flexibility (CPI)	.76
(Lack of) Physiological correlates of anxiety (CMI-Gurin)	-.47
Tolerance (CPI)	.32
(Lack of) Self-sentiment control or will power (IPAT-Q3)	-.28
Responsibility (CPI)	.23
(Lack of) Neuroticism (Bernreuter-F1)	-.21
Factor IV. Extroversion vs. Introversion	
Surgency (16PF-F)	.57
(Lack of) Neuroticism (Bernreuter-F1)	-.56
(Lack of) Social introversion or solitariness (Bernreuter-F2)	-.47
(Lack of) Intelligence (16PF-B)	-.46
Parmia (16PF-H)	.37
(Lack of) Need for independence (ISR-Zipf-Vroom)	-.37
Cyclothymia (16PF-A)	.32
Factor V. Aggressive Independence vs. Genial Responsiveness	
Protension or paranoid trend (16PF-L)	.65
Unhappy childhood (ISR, project staff)	.38
Schizothymia (Lack of Cyclothymia: 16PF-A)	-.30
(Lack of) Responsibility (CPI)	-.29
(Lack of) Intelligence (16PF-B)	-.28
(Lack of) Tolerance (CPI)	-.25

¹ An additional factor was obtained having just two scales—job satisfaction and confidence in organizational superiors—with sizable loadings. Neither of those measures loaded appreciably on any other factor. Inasmuch as these measures are seen as relatively temporary affective reactions to properties of the job or organization, rather than enduring properties of the person, this additional factor is disregarded in the treatment of personality in this and subsequent chapters.

from factor analytic studies of personality, refers to as emotionality or neurotic tendencies. It is also quite similar to the second-order factor Cattell calls anxiety, as it should be, given the prevalence of Cattell's scales in the matrix. The total IPAT anxiety scale loads .90 on this factor.

In light of the known correlates of the scales making up Factor I and the manifest content of their component items, a person at the high end of this dimension can probably be expected to have the following characteristics: extreme sensitivity to potentially stressful situations; a proneness toward the experience of negative emotional states (tension, anxiety, guilt, and others); fatigue and immobilization of energy for constructive work; concern with health; and unrealistic attitudes toward the self. By inference, he might be characterized as having poor ego integration, that is, excessive and potentially conflicting motives, inability to bind tension, and inadequate defenses and coping procedures.

The emotionally stable person (low on proneness to neurotic anxiety) seems to be cheerful, thick-skinned and cool-headed in periods of stress, nonintrospective, active, and outgoing. He may be well integrated and master of his motives and of his fate, but he may also be undermotivated and insensitive. Although we tend to see the low end of the neuroticism dimension as approaching the heroic ideal of emotional maturity and personal competence, it may be that it reflects in some cases tendencies toward an unhealthy lack of emotion. The emotionally stable person is generally characterized as healthy, but one who scores at that end of Factor I might have tendencies toward disorders which do not involve overt expressions of anxiety and emotionality as major symptoms.

Factor II: Favorable versus Unfavorable Self-Regard

The second factor is somewhat more difficult to interpret. Taken at face value, it would appear to be a second dimension of neuroticism or ego integration, but with the poles reversed.* One who is high on this dimension seems to be characterized by emotional maturity, social conscience, and integration of internal processes (the competent, confident, solid citizen); the opposite end seems to represent childish impulsivity and selfishness, and perhaps the confusion and inner turmoil of the adolescent.

* In fact, all the positively loading scales which make up Factor II load negatively on Factor I, and vice versa; the first two factors are not truly orthogonal, but are modestly correlated in the negative direction.

The prominence of the lie scale in this factor causes one to doubt this interpretation, and to ask whether substantial distortion might be involved, particularly at the high end of the scale. According to the manifest content of the component scales, a high scorer has pronounced tendencies toward favorable self-description. His responses on these scales portray him as an exemplary citizen with well-socialized control over impulses, strong regard for the welfare of others, and strength of character. There are, no doubt, some people who have these ideal characteristics and could respond honestly in these terms, admitting no weakness or fault because they have none. It seems likely, however, that this factor represents the response set of rating the self on a series of evaluative scales, the implicit common dimension being social desirability.

If, as the presence of the lie scale suggests, those who score high on this factor are refusing to admit weaknesses (rather than actually being free of them), the positive end might be better called "defensive presentation of self" than "integration and emotional maturity." The negative loadings of these scales on the anxiety factor suggest that the favorable self-describer may be distorting his image not only to the public but to himself as well.*

The present data do not permit a confident choice between these two basically different interpretations. Both may even be correct but for different cases. Given these interpretive difficulties and the fact that early exploratory analyses with this factor failed to produce readily meaningful patterns of results, no further discussion of this dimension is undertaken here.

Factor III: Flexibility versus Rigidity

The predominant scale for Factor III indicates a general dimension of flexibility-rigidity. A person at the flexible end is characterized by a free and easy openness to experience, adaptability in the face of changing conditions, and responsiveness toward others. He is probably free of any strong needs to structure excessively, to routinize activities, or to impose strict criteria of consistency on attitudes and beliefs. He also tends not to be overly critical of others. Although not necessarily a lack of internalized standards, the presence of low will power

* This interpretation is supported by the similarity of many specific items in the scales loading on Factor II to those of the MMPI K scale. According to Dahlstrom and Welsh, "the subject getting a high score on K not only denies personal inadequacies, tendencies toward mental disorders, and any trouble in controlling himself, particularly in regard to temper, but also withholds criticism of others" (1960, pp. 51-52).

suggests that this factor may be interpreted as other-directedness. Because of this, it seems likely that the highly flexible individual will be sensitive to and accepting of role pressures, and that he will strive to conform to the role requirements imposed on him by others.

In contrast, the rigid person is more apt to be inner-directed, perhaps irresponsibly so, to be resistant to influence, and to prefer a neat and orderly routine in his daily life. He is likely to be inconsiderate of others' needs, critically judgmental of their behavior, and intolerant of their weaknesses. The presence of neuroticism and physiological manifestations of anxiety in this factor suggests that the rigidity might be defensive in nature, that his adherence to set patterns of thought and behavior stems from a fear of rocking the psychological boat. Once having learned the regulations and norms of the organization, he is likely to stick to them to the letter. The rigid person seems well fitted to routine and systematic jobs and to those requiring perseverance, but not to innovative jobs or to those requiring a great deal of coordination with other roles.

Factor IV: Extroversion versus Introversion

Factor IV seems to be a combination of sociability and surgency. The extrovert is characteristically active and outgoing, oriented toward things and practical affairs. He has a high general drive level and a cheerful happy-go-lucky temperament; he is zestfully involved in accomplishing things in the real world. In keeping with this, he enjoys social affairs and the company of others and is assertive, perhaps even aggressive, in social activities. The introvert, on the other hand, tends to be quiet, shy, and withdrawn, avoiding prominence in social affairs. He tends toward introspectiveness and thoughtfulness, and invests himself more in the world of ideas than in practical day-to-day affairs. The presence of neuroticism suggests an inner tension and lack of self-confidence which may account for his lack of energy and general disengagement from external affairs, particularly social events.

The appearance of Cattell's intelligence factor on Factor IV is somewhat problematical. We are tempted to interpret the low intelligence in such a way as to round out the portrait of the surgent extrovert as a "male animal": full of energy, gregarious, ambitious, back-slappingly aggressive, and conventional, whose lack of anxiety is partially a function of his not being too bright. However, it seems equally likely that the low score on Cattell's intelligence scale could have resulted from the surgent extrovert's test-taking impatience and the introvert's preference for intellectual tasks.

Three of the four Cattell scales which load on this factor—surgency, parmia, and cyclothymia—are major components of the second-order factor he calls extroversion-introversion. The presence of the Bernreuter scale of social introversion (solitariness) and the need for independence further contribute to this interpretation. The sociability aspect of this dimension reflects the extrovert's affiliative orientation and the introvert's concern with autonomy. This factor has obvious relevance for the interpersonal aspects of role systems. A more complete treatment of it is given in Chapter 15.

Factor V: Aggressive Independence versus Genial Responsiveness

The person who scores high on Factor V presents a picture quite congruent with the traditional conception of the aggressive psychopath: undersocialized, lacking in strongly internalized ethical or civic standards (low responsibility), suspicious of others and tending toward localizing blame in other people and in his background (paranoid trend, unhappy childhood), and having a limited capacity for positive affective relations with others (schizothymia, intolerance).

The term independence in the factor name reflects not the shy, withdrawn solitariness of the introvert but rather a selfish lack of concern for others, a tendency to go one's own way in spite of others' needs or wishes. Hostility or aggressiveness is prominent in the measure.

The relative absence of guilt and manifest anxiety typically attributed to the psychopath is indicated in a negative sense by the fact that, of the five factors which compose the Cattell anxiety scale, only the paranoid trend loads highly on Factor V. The salience of schizothymia is interpreted, not as evidence of withdrawal from interpersonal relationships, but rather in its connotation of constricted affective responsiveness.

In contrast, one who scores low on Factor V seems to be agreeable, lighthearted, cooperative, friendly, and responsibly realistic about himself and others.

Summary

The primary purpose of this chapter has been to lay the conceptual and methodological groundwork for the use of personality variables in analyzing the consequences of role conflict and ambiguity. Differences in the personalities of focal persons enter into the analysis of

events in their working lives in at least three ways. First, the behavior of role senders is significantly affected at times by the impression they have formed of the focal person's unique traits. Second, certain characteristics of personality have obvious bearing upon the individual's tolerance for stress. Finally, there are systematic individual differences in styles of coping with stress, both as regards differential skills and with respect to individual preferences. This last area is most in need of theoretical treatment by psychologists.

The person under stress is viewed as confronting three interrelated tasks. He must deal with the objective situation so as to reduce or eliminate its stressful characteristics. He has to master the tension and negative emotions which the core problem arouses in him, a task sometimes even more urgent than the first. He frequently has to confront derivative problems which have been created by his original coping efforts. Each of these aspects of coping is illustrated by various parts of our data.

Subsequent chapters in this section will trace the implications of the specific personality variables discussed above. Chapter 14 takes up the dimension of neurotic anxiety; Chapter 15, introversion-extroversion; Chapter 16, flexibility-rigidity; and Chapter 17, achievement orientations. These dimensions, of course, are not completely independent of each other, nor are they unrelated to some aspects of the individual's interpersonal relations. But each variable will bring into focus a somewhat different facet of the dynamics of adjustment to conflict and ambiguity.

Neurotic Anxiety

THE CONCEPTS of anxiety and neuroticism have held a central position in personality theory since the turn of the century and continue to do so despite persisting problems of definition and measurement. We are concerned here with a cluster of personality traits called anxiety by Cattell (1957) and neuroticism by Eysenck (1961) and others. Personality Factor I, neurotic anxiety versus emotional stability, is an attempt to measure this cluster, or the dimension assumed to lie beneath it. Neuroticism can be summarized in terms of four major categories: excessive and conflicting motivations, emotionality and instability, inadequate coping procedures, and low self-esteem.

Excessive and Conflicting Motivations. In the psychoanalytic literature emphasis is placed on internal (often unconscious) motivational conflicts as determinants of anxiety and neurotic reactions. The initial theoretical concentration centered on the conflict between sexual drives (id pressures) and strong moral prohibitors (superego demands). More recently, there has been growing agreement on the neurotic implications of distortions in other motives; for example, achievement aspirations, dependency needs, power and status motives. Tensions associated with frustrated or inadequately satisfied motives constitute a major component of neurotic anxiety.

Emotionality and Instability. In addition to the likelihood of frequent anxiety attacks, the neurotic tends to experience a wide variety of emotional states—shame, guilt, depression, anger, fear, as well as elation, joy, pride, and affection. He is frequently impatient, jittery, irritable, sometimes grouchy and short-tempered. Moreover, such states

are apt to change rapidly and sometimes without apparent cause. Although not all neurotics demonstrate this full spectrum of affective states, their emotions tend to be more erratic, less under control, and more unpleasant than those of normal persons. More important for our purposes, less stressful stimuli are sufficient to evoke an unpleasant emotional response from the neurotic.

Inadequate Coping Procedures. Added to the strong demands of internal motives is a characteristic lack of ability to channel emotional and motivational energy in effective ways. Responses tend to be impulsive rather than planned; the neurotic lacks perseverance, will power, and the ability to "bind" tensions. In place of effective and culturally preferred expressions of motivational energy to cope with his tensions, he frequently employs such defense mechanisms as denial, repression, regression, and projection.

Low Self-Esteem and Excessive Concern with Personal Weaknesses. The frustrated needs, ineffective coping mechanisms, and emotional strains of neuroticism exact their costs physiologically and psychologically. Inattention and disrupted thought processes, disturbed sleep, and increased visceral activity (resulting from autonomic concomitants of the emotional states) may lead to frequent feelings of failure, poor health, and lack of energy. The neurotic typically holds himself in low regard and is more attuned to his limitations and weaknesses than to his strengths and competences. He tends to be self-oriented, sometimes defensively conceited, but more often burdened with self-doubts and recriminations.

This brief caricature of the neurotic represents the extreme of the continuum with which we are concerned. Most people, of course, lie neither at this extreme end nor at the opposite end of the continuum, where all motives are well integrated, emotions are stable, coping is effective, and self-esteem is high.

The characteristics of neuroticism are evident in the components of the neurotic anxiety factor utilized in the present research: free-floating anxiety or guilt proneness; inner conflict and tension; lassitude-malaise; lack of will power; neuroticism (Bernreuter); physiological manifestations of anxiety; and lack of energetic activity. The IPAT Anxiety Test, which has been well standardized and validated, correlates .90 with this factor and is used for the statistical analyses presented here. Although a wide range of individual differences on this measure is found in our sample of focal persons, only two of them score high enough to indicate that they might be suffering from an active neu-

rosis.* For the most part we are dealing with individual differences well within the normal range; the sample of focal persons has been divided at the median into high versus low neurotic anxiety.

Neurotic Anxiety and the Experience of Conflict

The concept of neuroticism implies a heightened sensitivity to stressful environmental conditions, a low degree of stress tolerance. A positive association exists between degree of objective role conflict and the intensity of conflict as experienced by the focal person. There is also a tendency for those who are high on neurotic anxiety to experience more intense conflict than do those who are more stable and integrated ($p < 0.05$).

But Fig. 14-1 suggests that the situation may not be so simple as this. Among persons low in anxiety proneness, no significant difference in experienced conflict is found between conditions of high and low role conflict. Those who are high on neurotic anxiety also experience little conflict when objective role conflicts are absent, but intense conflict when they are present. Ten out of the 12 high-anxiety subjects who are faced with role conflicts discuss at some length the kinds of inner conflicts they experience and report them to be relatively severe. Less than a quarter of the subjects in any of the other three conditions discuss comparable conflicts at all.

A distinction needs to be drawn between the perception of objective role conflict and the experience of these conflicts as internal. The latter concept is defined in terms of aroused motivational tendencies in the person, inconsistent or contradictory needs or values aroused in a given situation.

Role pressures are effective, of course, only to the extent that they create intended psychological forces in the person, that is, stimulate him to conform to the corresponding role expectations. Therefore conflicting pressures, if effective, should lead to motivational conflicts. However, role pressures do not always elicit the intended psycholog-

* Neurosis as a general category of psychiatric diagnosis includes several varieties ranging from dysthymic reactions (anxiety states, reactive depressions, obsessions) to hysterical conversion reactions. This questionnaire measure of neuroticism is probably more sensitive to the dysthymic manifestations than to the hysteric; in advanced cases of conversion hysteria the person may be relatively unaware of either internal conflict or anxiety. Thus the measure is perhaps best interpreted as proneness to anxiety neuroses.

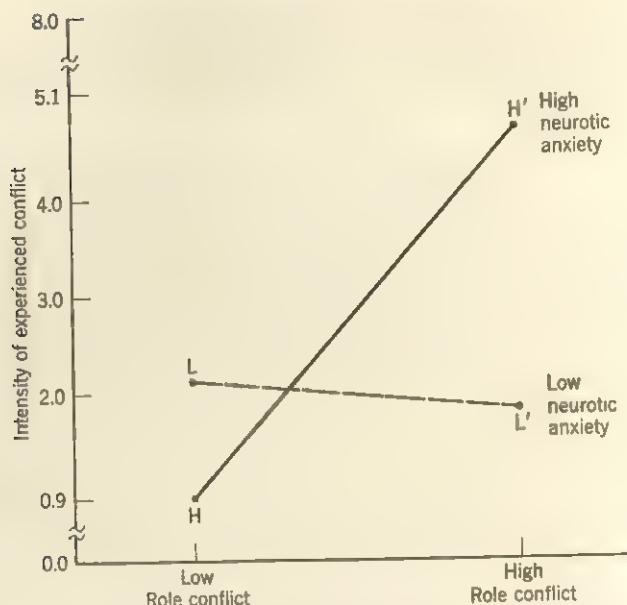


Figure 14-1. Mean intensity of experienced conflict in relation to role conflict and neurotic anxiety (from the intensive study). N : $H = 11$; $H' = 13$; $L = 12$; $L' = 13$. Comparison— H (0.9) vs. H' (4.7): $p < 0.001$; L (2.1) vs. L' (1.8): n.s.; H vs. L : n.s.; H' vs. L' : $p < 0.01$; $H + H'$ (2.9) vs. $L + L'$ (1.4): $p < 0.05$.

ical forces. A well-integrated person must be able to resist pressures which place him in conflict.

This does not imply that one low on anxiety fails to perceive or is unaware of the expectations of those around him. On the contrary, responses in the low-anxiety group are tantamount to, "Oh yes, I know what he wants me to do, but that's not what I need to do in this situation." People in this group are able to accept or reject influence selectively and realistically. Those high on neurotic anxiety, on the other hand, seem to be less able to handle conflicting pressures.

Not only do role pressures sometimes fail to elicit intended effects, they often produce unintended psychological forces. A mild criticism from a superior, intended to correct a minor fault, may be interpreted by a hypersensitive person as indicating a major lack of confidence or even as evidence of strong hostility. The motivational result may be the creation of forces to correct the fault, but they are apt to be exaggerated out of all proportion to the desired change. They also may be substantially different in direction, for example, toward counterhos-

tility and stubborn (but disguised) nonconformity. The severe psychological conflicts of the neurotic who is faced with role conflict may involve such unintended effects as well as the intended motivational effects of his role set.

Job Tension and Satisfaction

The mention of experienced conflict may not reflect perfectly one's emotional reaction to the conflict. Figures 14-2 and 14-3 present the mean degrees of tension and job satisfaction for persons high and low in anxiety under high and low degrees of role conflict. Both objective role conflict and neuroticism contribute to tensions and undermine satisfactions on the job. Although the differences among the means are not large, the two independent variables apparently combine additively. Thus the anxiety-prone persons under role conflict suffer severe tensions and experience little satisfaction; those who are low on both objec-

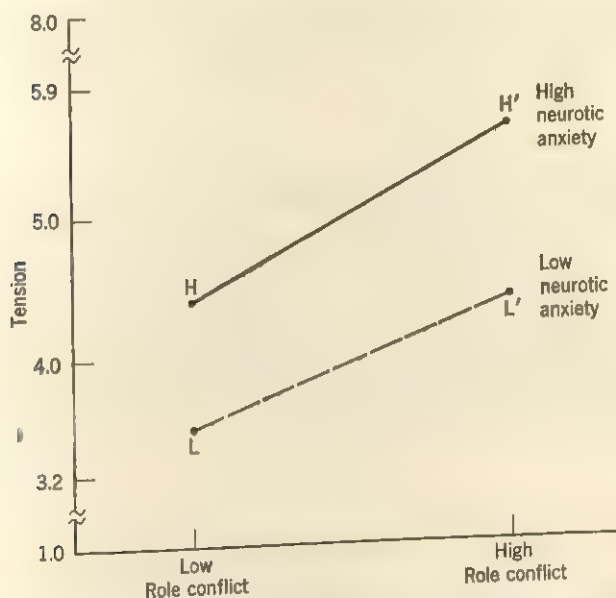


Figure 14-2. Mean tension in relation to role conflict and neurotic anxiety (from the intensive study). N : $H = 11$; $H' = 13$; $L = 12$; $L' = 13$. Comparison— H (4.4) vs. H' (5.6): $p < 0.10$; L (3.5) vs. L' (4.4): $p < 0.08$; H vs. L : n.s.; H' vs. L' : $p < 0.05$; $H + H'$ (5.1) vs. $L + L'$ (4.0): $p < 0.01$.

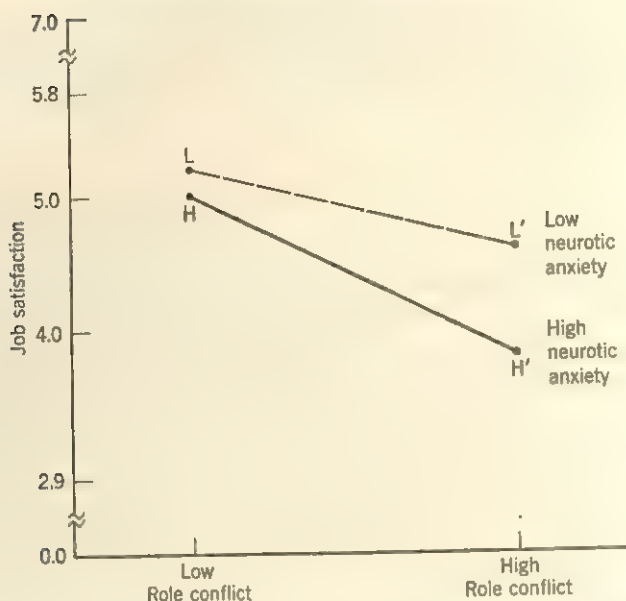


Figure 14-3. Mean job satisfaction in relation to role conflict and neurotic anxiety (from the intensive study). N : $H = 11$; $H' = 13$; $L = 12$; $L' = 13$. Comparison— H (5.0) vs. H' (3.8): $p < 0.01$; L (5.2) vs. L' (4.6): n.s.; H vs. L : n.s.; H' vs. L' : n.s.; $H + H'$ (4.4) vs. $L + L'$ (4.9): n.s.

tive conflict and anxiety proneness experience little tension and enjoy a high degree of satisfaction on the job. Those who are high on anxiety and faced with little conflict, or low on anxiety and faced with strong conflict, report moderate degrees of tension and satisfaction.

When the data in Fig. 14-2 are broken down even further according to degree of role conflict, it becomes apparent that neuroticism provides an additional increment of tension at every level of role conflict. This is quite consistent with the conception of neuroticism as involving internal sources of stress which add to the effects of external stresses.

Sense of Effectiveness versus Futility

When conditions become sufficiently stressful, the resulting tensions and anxieties may interfere with a person's effectiveness. His energies and thought processes may be bound up in efforts to cope with the discomforts of his emotional response, reducing his ability to cope with

the objective sources of the stress. He may thus turn his thoughts inward and become concerned about his health, his lack of energy and drive, and his inability to perform effectively. He may become more fearful of possible failures and less hopeful for favorable outcomes. In the absence of effective measures for dealing with stress and tensions, a person's perception of himself as an active and effective agent, capable of controlling his own fate, may be easily undermined. He may manifest a sense of futility.

From our second interview with each of the focal persons, it was possible to judge the extent to which the person demonstrated a sense of futility, a feeling of lack of personal effectiveness. The results of these judgments are presented in Fig. 14-4. The results here are slightly different from those in the above figures. Neurotics clearly demonstrate greater futility than non-neurotics, perhaps because of the relative inadequacy of their modes of gratification and the ineffectiveness of their coping mechanisms.

Non-neurotics, especially those in conflict-free roles, tend to feel quite effective in their jobs; they feel that their behavior makes a sig-

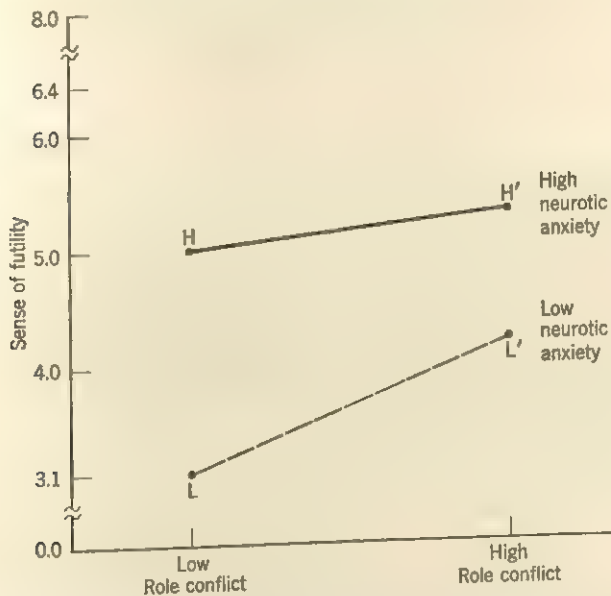


Figure 14-4. Mean sense of futility in relation to role conflict and neurotic anxiety (from the intensive study). $N: H = 10; H' = 12; L = 12; L' = 12$. Comparison— $H (5.0)$ vs. $H' (5.3): n.s.$; $L (3.1)$ vs. $L' (4.2): p < 0.01$; H vs. $L: p < 0.02$; H' vs. $L': n.s.$; $H + H' (5.2)$ vs. $L + L' (3.3): p < 0.01$.

nificant difference in the way things turn out. But this sense of potency, of mastery over the situation, is undercut by conflicting role pressures; under conflict a sense of futility creeps in. This may be quite realistic, of course; if environmental pressures are mutually contradictory, the person may be able to handle only some of them effectively.

This reasoning might be expected to hold for those who score high on neurotic anxiety as well as for those who score low. But the presence of objective conflict would appear (from Fig. 14-4) not to increase very much the already high level of futility of the neurotic. An examination of the individual scores indicates that many of the neurotics show a very high level of futility under conditions of high role conflict; they feel helpless and hopeless in a threatening and capricious world. Others, however, show no signs of futility; they emphatically assert that their own personal competence or the propitious intervention of a benevolent superior will pull them out of the current difficulty. If this is whistling in the dark, it may be the only defense left to the highly conflicted, dependent person prone to neurotic anxiety. Once again we find some evidence of role conflicts and neuroticism combining in an additive way, each adding an increment to the degree of futility manifested by the subject. Here, however, neuroticism seems to create a more marked difference than does objective conflict.

Neuroticism and Affective Interpersonal Bonds

A realistic adjustment to social life requires, according to Erikson (1950), an ability to maintain close, intimate relations with others coupled with an ability to hold oneself at a distance from them. That is, one needs an ability to choose between independence and intimacy, to have close personal ties with others when this is gratifying and meaningful but to avoid clinging dependencies and loss of "individuation." As can be seen in Fig. 14-5, this ability is associated with the lack of neurotic anxiety.

Those who tend toward emotional stability have strong, close relations of trust, respect, and liking for their associates when in a conflict-free environment; these relations seem to be seriously undermined when the environment poses strong conflicts.* This appears to reflect

* It should be noted that extreme degrees of intimacy are seldom found in industry, at least according to our present data; close personal friendships among workmates tend to be marked exceptions to the general rule. Index scores in the 13.5 to 14.5 range are best interpreted as "cordial, congenial, trusting, respecting, understanding." Lower scores, which are common, reflect interpersonal deficiencies

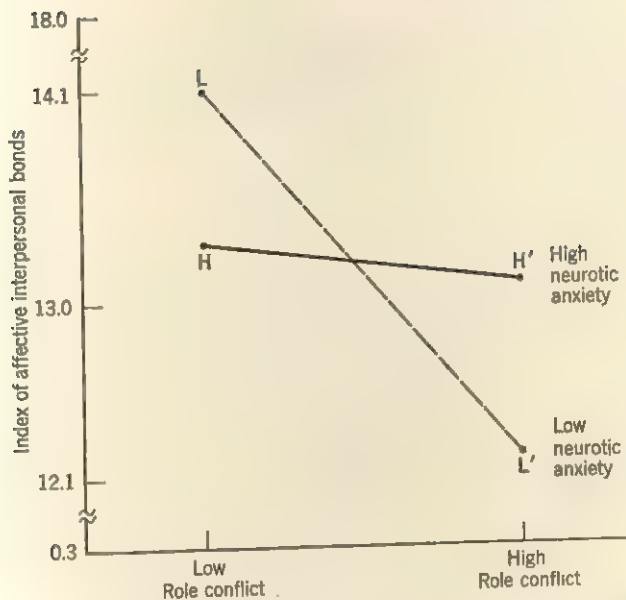


Figure 14-5. Mean index of affective interpersonal bonds scores in relation to role conflict and neurotic anxiety (from the intensive study). *N*: $H = 11$; $H' = 13$; $L = 12$; $L' = 13$. *Comparison*— H (13.3) vs. H' (13.1): n.s.; L (14.1) vs. L' (12.2): $p < 0.001$; H vs. L : $p < 0.08$; H' vs. L' : $p < 0.05$; $H + H'$ (13.2) vs. $L + L'$ (13.1): n.s.

a rejection of or withdrawal from those who are creating the stress. Those who are high on neuroticism fail to attain in a benign environment the intimacy which characterizes their more integrated counterparts. But they also fail to achieve the separation from their associates when the latter pose conflicts for them.

This finding suggests a pathetic dilemma. The neurotic who suffers a great deal under stress is relatively unable to cut his ties with those who create the stress. This stems largely from his own dependency needs. Because of internal weaknesses and emotional vulnerability, he often needs considerable support from others. His immobility and indecisiveness when under conflict may frequently cause him to turn to others for direction.

Unfortunately, the neurotic all too often lacks the insight for really effective interaction and mutually gratifying interpersonal relations. His excessive demands for support from others often constrict their area of free movement to the point of taxing their tolerance. And turning to others for direction often is an invitation to exacerbation

of the conflict; the addition of new directives may further complicate a situation already too complicated for him to handle. Dependency at this level is both paradoxical and self-defeating: the neurotic cannot get along without others, but neither can he get along very well with them.

Implications of Neurotic and Non-neurotic Reactions

The pattern of emotional reactions to role conflict, evidenced in the data reported above, is impressively persistent. The objective conflict and the neurotic, anxiety-prone predisposition combine additively in producing negative emotional states. If only the extreme quartiles of each of these variables are considered, the pattern is even more dramatic. Figure 14-6 presents the average profile across several relevant variables of four groups: (1) those who are in the top quartile on both neurotic anxiety and degree of role conflict, (2) those in the

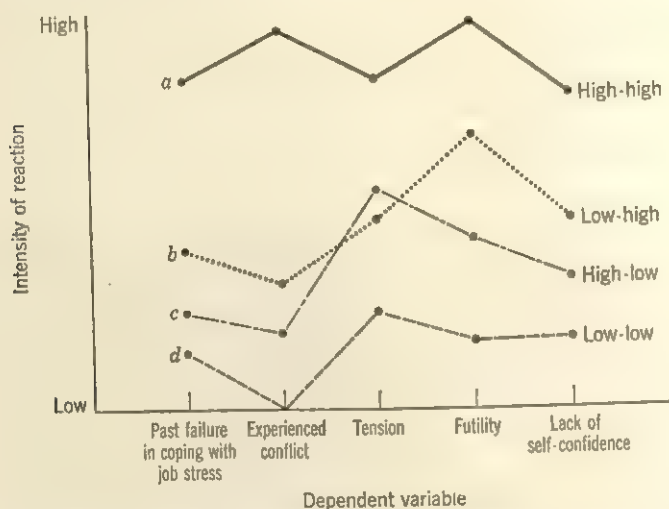


Figure 14-6. Mean profiles of emotional reactions for cases in the extreme quartiles on neurotic anxiety and degree of role conflict. Dependent variables converted to standard scores; high scores indicate more negative, less desirable reactions from the person's point of view. (a) Highest quartile on conflict and highest quartile on neurotic anxiety score ($n = 5$). (b) Lowest quartile on conflict and highest quartile on neurotic anxiety score ($n = 6$). (c) Highest quartile on conflict and lowest quartile on neurotic anxiety score ($n = 7$). (d) Lowest quartile on conflict and lowest quartile on neurotic anxiety score ($n = 5$).

bottom quartile on both variables, and (3) and (4) those in the top quartile on one variable but the bottom quartile on the other. Clearly the neurotics under very high conflict cope least successfully and suffer the most; those who are most stable emotionally and enjoy conflict-free roles cope well and suffer little. The two groups in which neuroticism and role conflict contrast (high-low, low-high) are intermediate on all of these variables. The emotional reaction of neurotics at any given level of conflict is more intense than is that of persons relatively immune to neurotic anxiety. Nonetheless for neurotic and non-neurotic alike, environmental stress leads to increases in tension, dissatisfaction, and a sense of futility.

Neuroticism and Productive Work

It would be a mistake, however, to conclude that those prone to neurotic anxiety are undesirable as organizational members. The picture drawn above is rather black, emphasizing the neurotic's sensitivities, inadequacies, and maladaptive patterns of response. This characterization is one-sided, for we are concerned here with the emotional costs of role-induced stress, and these costs are apparently excessive for people high on this dimension.

But neurotics also frequently have strengths—assets which offer valuable contributions to organizational objectives. Neurotic symptoms and the organizational contribution may be closely associated. For example, several focal persons in the intensive sample handle their neurotic conflicts by throwing themselves into their jobs with vengeance. Assembly Superintendent, discussed in Chapter 18, provides a dramatic case of such work addiction.

The anxiety proneness of a major executive in the intensive study leads him to anticipate problems well in advance and "worry" them through to solution. He handles the tensions of oncoming stressful situations (e.g., difficult reports to the board of directors) by becoming overprepared. His remarkable memory for detail and his analytic abilities are often well used in warding off potential crises. His worry and anxiety exact their cost on him and his family, in terms of sleepless nights, periods of rapid weight loss, and loneliness for his wife, but they are not without benefit to the organization.

Even the dependency of the neurotic may be functional for the organization. If he has an understanding and sympathetic superior who will give him direction and support in difficult periods, the dependent neurotic may be the organization's most loyal member and its hardest

worker. These possibilities do not imply that neuroticism and proneness to anxiety are in themselves desirable from the organizational view. They do argue, however, that save in extreme cases there is little reason for managements to consider a policy of selecting out anxiety-prone persons.

Neurotic Symptoms in Non-neurotics under Stress

There is substantial similarity in emotionality between non-neurotics under role conflict and neurotics in conflict-free roles. The presence of environmental stress seems to produce "neurotic" emotional reactions in those who score low on the neurotic anxiety scale. The interview material in a number of such cases revealed even more impressive indication of neurotic symptoms in distressed non-neurotics.

Evidence of acute anxiety attacks came up both in the manifest content of the words being said and in mode of expression and tone of voice. Nervous laughter or low and cracking voices accompanied the discussions of the person's worries and concerns in several cases. One focal person broke into tears as he reported how depressed he had been because of the way things were going on the job. In two cases respondents asked that the tape recorder be turned off while they were recounting their conflicts, indicating both a need to "talk out" their problems with someone and an anxious concern about having their words go on the record. Such incidents occurred, of course, among the high-neuroticism group as well, but those cited above represent people who score below the median on the anxiety scale. Reports of chronic fatigue and neurasthenic immobilization in the face of conflict were almost as common for people low on the scale as for those who scored high.

The case material supports the contention that role conflicts have more pronounced effects on self-confidence and self-esteem for those high in neurotic anxiety. But such consequences are also found for the low scorers. Self-oriented concerns (e.g., worries about adequacy) are common in both groups, as are tendencies toward turning against the self in times of trouble. Evidence of the use of other so-called neurotic defenses—projection of hostility and of blame, displacement of role-induced anger and aggression to the home situation, denial of personal weaknesses or of the presence of environmental stressors—is found in the protocols of non-neurotics as well as those of the anxiety-prone.

Autonomic manifestations of tension and anxiety, such as sweating,

trembling, upset stomach and loss of appetite, constipation and diarrhea, are mentioned by non-neurotics under role conflict, though not as frequently as by neurotics under similar conditions. Such reports are interpreted as reflecting in part real physiological malfunctions (perhaps psychogenic), but the mere fact of reporting them probably also indicates a concern with bodily functions and ailments. Reports by several focal persons about heart attacks and ulcers that others have suffered, and fears that such disorders may descend upon them, have a hypochondriacal flavor.

Our findings argue that, even in people who are emotionally stable, severe role conflicts can lead to those kinds of cognitive, emotional, and physiological responses which are generally interpreted as symptoms of neurosis and of active neurotic conflicts. These may be temporary states which pass with the resolution of the conflict episode. Conflict may provide the opportunity for learning new modes of behavior and coping mechanisms, for increasing the person's capacity to tolerate and handle stress. But it is also plausible that conflict, if sufficiently severe and persistent, may disrupt his integrative processes, undermine his more desirable and reinforce his more neurotic defenses, and leave him more vulnerable to stress in the future.

This leads to the question of whether chronic environmental stress produces changes in personality along the dimension of neuroticism. Can recurrent and persistent role conflicts increase one's proneness to neurotic anxiety? Confirmation of this hypothesis requires longitudinal study, but our findings suggest that the personal costs of conflict endure well beyond the crisis episode.

Summary

In comparing the emotional reactions of different people to role conflict, it is evident that at any given level of conflict the reaction of relatively neurotic individuals is more intense than that of less anxiety-prone persons. Indeed, evidence of inner conflict in response to strong role pressures is concentrated among the more neurotic personalities in the intensive study, although dissatisfaction, tension, and feelings of futility occur among all persons under pressure. In his interpersonal relations the neurotic individual is less likely to cut himself off from those who create stress, a fact which may well reflect his greater dependency needs. Although the neurotic's hypersensitivity exposes him to greater strain than that of his non-neurotic counterpart,

his high level of tension is not necessarily disabling and it may lead to coping efforts which are reasonably effective for the person and acceptable to the organization. The evidence urges the conclusion that "neurotic" and "non-neurotic" reactions to role conflict are substantially similar, and that sufficient environmental stress may produce neurotic symptoms even in those who show little predisposition to neurotic anxiety.

15

Extroversion-Introversion

EVIDENCE was presented in Chapter 4 suggesting that highly conflicting role pressures lead to a deterioration in social relations within the role set, as well as to emotional disruptions. Let us now turn to a more detailed analysis of the impact of role conflicts on interpersonal relations, and to a consideration of personality variables which might be implicated in this process.

The Concept of Extroversion-Introversion

With the possible exceptions of emotional stability and intelligence, perhaps no dimension of personality has been treated so extensively as extroversion-introversion. Jung's early and comprehensive treatment (1923) began a long series of investigations and discussions into the meaning of these terms and into the psychological dynamics implied by them. The general utility of the conception has been challenged, and with some justification. However, a number of recent quantitative multivariate studies (Cattell, 1957; Eysenck, 1960) strongly suggest that extroversion-introversion is a readily distinguishable dimension of personality and a useful predictor of individual differences in response.

In spite of its emergence as a single factor in a number of studies, extroversion-introversion is a complex dimension made up of several components. Let us consider some of the ways in which the behavior of persons at the polar extremes is theoretically expected to differ.

Objective versus Subjective Orientation

The extreme extrovert is generally seen as being in close touch with his environment. He shows a great deal of concern with concrete things in the real world and is extremely responsive to changes in external stimuli. He tends to be acutely task oriented, involved in direct action, and practical. The introvert, on the other hand, tends to be self-oriented and introspective. His interests run toward the intellectual and artistic, and he shows more concern for abstract ideas than for practical reality. In this sense he may be called autistic. His extreme concern for internal matters may result in insufficient attention to practical affairs, and his values are more apt to be idealistic or sentimental than realistic. The extrovert turns his thoughts, feelings, and attention outward, perhaps at the expense of self-insight; the introvert turns his inward, sometimes at the expense of useful and effective action.

Surgency versus Desurgency

In keeping with the interests and concerns of the extrovert, he tends to be outgoing, active, and zestful in his overt behavior. He is often cheerful and happy-go-lucky. His demonstrativeness is summarized in Cattell's term *surgency*. The introvert tends to behave in a serious, quiet, constrained, even inhibited manner.

Sociability

In interpersonal matters as in the worlds of thought, feeling, and action, the extrovert tends to be outgoing. He enjoys social affairs and likes to be with people. He shows a free and easy gregariousness in social interaction. He is often open and warmhearted with close friends and is generally accepting of and involved in the behavior of others. But this involvement in social relations reflects not so much a dependency on others as an interest which grows out of self-confidence. As a result he is often prominent in social groups, especially in those which are newly formed. At the other extreme the introvert is more solitary, shy, and retiring. He tends to avoid social gatherings and personal involvements. He is often noncommunicative, even secretive, and develops close relationships only with great effort.

Emotional Vulnerability

The general carefree attitude of the extrovert apparently serves him in good stead in periods of stress. He is seldom troubled by tension or anxiety; cool-headedness in the face of stress is more typical. Moreover, he tends to be involved in but not immobilized by potential failures, a frequent source of stress in an achievement-oriented society; he approaches risks with a spirit of adventure and even enthusiasm. He sees problems as existing in the environment, not in himself. Consistent with this picture is the extrovert's persistence in active coping efforts in the face of stress. The introvert, on the other hand, tends to be highly ego involved in achievement or competitive situations and thus vulnerable to the threat of failure. He is more concerned with security than with adventure in high risk situations. Moreover, he is apt to be acutely bothered by tension and anxiety; anxiety has more conscious manifestations for him than for the extrovert. Resignation or withdrawal by the introvert in response to stress tends to replace the extrovert's assertive coping activity.

This theoretical conception of the behaviors and characteristics which differentiate introverts and extroverts, based largely on clinical studies, matches quite well the fourth factor derived from the objective questionnaire material (Table 13-1). The objective-subjective distinction is reflected in Cattell's cyclothymia-schizothymia scale and probably in the intelligence loadings. Surgency-desurgency, the active-passive dimension, is represented by Cattell's surgency scale. Both the Bernreuter scale of social introversion and the measure of need for independence portray the sociability aspects of extroversion-introversion. Finally, the emotional vulnerability of introverts is reflected in the negative loading of the Bernreuter scale of neuroticism and in the positive loading of Cattell's parmia (immunity to parasymphathetic neural reactions to stress).

The relationship between introversion and neuroticism has long been discussed in the literature, and some components of the neurotic anxiety factor also load significantly on Factor IV (extroversion-introversion) in the present study. The association between these two factors (which probably are not truly orthogonal) may result from the proneness of introverts toward anxiety neuroses, and the tendency for Factor I to measure these more completely than other neurotic manifestations.

Extroversion-Introversion and the Interpersonal Consequences of Role Conflicts

Given our focus on interpersonal consequences of conflict and ambiguity, the present chapter is primarily concerned with the sociability components of introversion and extroversion. The Bernreuter scale of social independence (solitariness) versus sociability (gregariousness) probably best taps this aspect of the total factor. The introvert's orientation toward autonomy and the extrovert's affiliative tendencies are well reflected by this scale. Therefore the quantitative results presented in this chapter are based on a median split of the sample of focal persons on this measure. Its location in the factor structure (Chapter 13) contributes to the interpretation of the findings.

Sociability and Frequency of Social Interaction

The very core of the concept of sociability as a personality dimension implies variation in tendencies toward social interaction; extroverts are expected to be in close, constant communication with their associates while introverts are expected to communicate less frequently. In Fig. 15-1 this is shown to be the case, but a more striking finding is also presented there.

In Chapter 4 data were presented showing that role conflicts tend to undermine communication processes within the role cluster. Now we see that this interpretation is as appropriate for extroverts as for introverts. Under relative freedom from conflict introverts communicate nearly as frequently as do extroverts; when conflict is high, extroverts are almost as noncommunicative as introverts. Frequency of communication in organizations certainly is not determined solely by personal characteristics; situational factors seem to play a more significant part.

Sociability and Social Influence

Communication is, of course, the medium for social influence. If a person's role senders are attempting to influence him to be something he is not or to do something he finds difficult or unpleasant, a reduction in communication may effectively curtail the influence. Thus withdrawal from communication may be seen as a coping technique aimed at protecting the self from stressful role demands. Further evidence of this coping effort can be seen in Fig. 15-2.

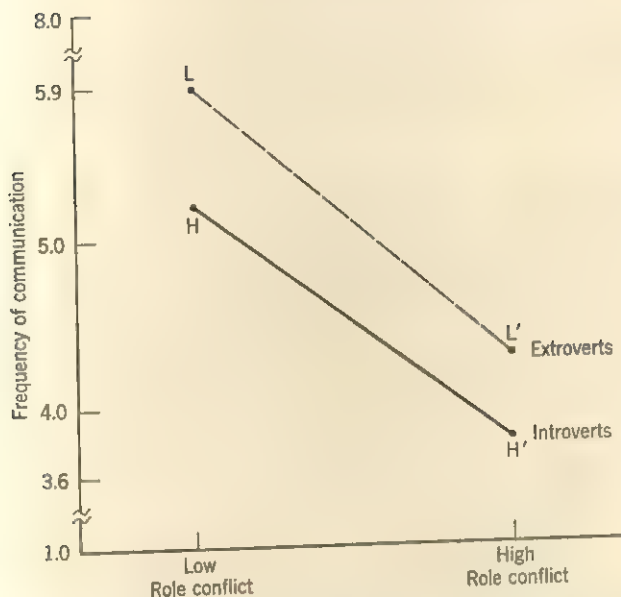


Figure 15-1. Mean frequency of communication with role senders in relation to role conflict and extroversion-introversion (from the intensive study). N : $H = 6$; $H' = 17$; $L = 17$; $L' = 9$. Comparison— H (5.2) vs. H' (3.8): $p < 0.05$; L (5.9) vs. L' (4.3): $p < 0.05$; H vs. L : n.s.; H' vs. L' : n.s.; $H + H'$ (4.1) vs. $L + L'$ (5.4): $p < 0.01$.

Both extroverts and introverts attribute significantly less power to their associates under high than under low conditions of conflict. The difference in attribution of power under the two conditions of conflict is somewhat greater for the introverts, however. Introverts attribute very little power to their role senders when conflict is severe, but when they are free of conflict they report that their senders constitute a very important source of influence on them. When the social environment is benign, they seem to communicate well and to indicate considerable receptivity to influence from those around them.

But this differential attribution of power appears to lack objective support. An assessment of the effective power of role senders over each focal person, independent of the focal person's perception, was made from a broad battery of questions asked of each role sender (Chapter 11). According to this measure, role senders of introverts have moderate power on the average, both under conditions of low and high role conflict. Moreover, variations in power so measured do not correspond to the differences in attributed power. Extroverts

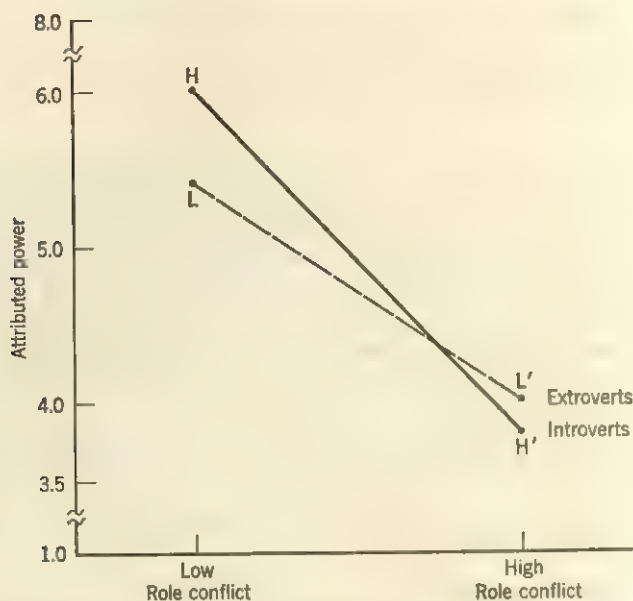


Figure 15-2. Mean power attributed to role senders in relation to role conflict and extroversion-introversion (from the intensive study). N : $H = 6$; $H' = 17$; $L = 17$; $L' = 9$. Comparison— H (6.0) vs. H' (3.8): $p < 0.01$; L (5.4) vs. L' (4.0): $p < 0.01$.

are apparently more realistic in evaluating the power of their associates. For extroverts, a reduction in effective power of role senders is evident as conflict increases, a reduction comparable to that observed with respect to attributed power.

Persons with strong tendencies toward introversion are apparently somewhat autistic in their attribution of power, reflecting the social world not as it is but as they would like it to be. These findings should not be interpreted as pure fantasy on the introvert's part. Rather, the concept of power should be examined from the point of view of both the influencer and the target of influence. When introverted persons are the targets of influence, role senders (influencers) seem to have only moderate success even under conditions of low role conflict. However, the introverted focal person reports that his associates have a substantial impact on him (not necessarily in ways they desire) when they withhold pressures toward change, and very little impact when they apply such pressures. In other words, the introvert's associates loom large in determining his behavior when they avoid creating con-

flicts for him; when role conflicts are imposed, the introvert attempts to wall himself off from those creating the conflict. He may carry out the essentials of their legitimate demands, but he allows them to affect as little of his life as possible.

Affective Interpersonal Orientations and Sociability

If introverts differ somewhat from extroverts in their communication patterns and attribution of power, they contrast even more markedly in their affective attachments to their associates. In general the higher the social independence score of the focal person, the lower his index of affective interpersonal bonds ($r = .44$). Although one might expect this to be part of the general orientation of the highly introverted person, a more detailed analysis places this interpretation in serious doubt.

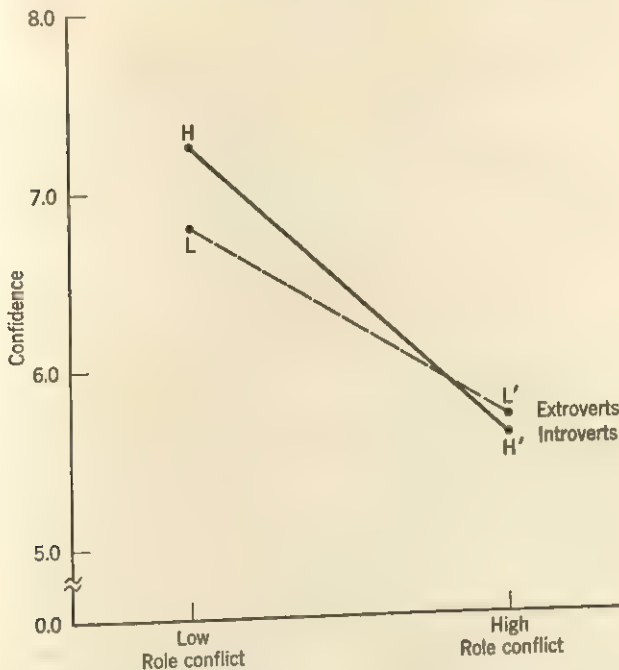


Figure 15-3. Mean confidence of focal person in his organizational superiors in relation to role conflict and extroversion-introversion (from the intensive study). N : $H = 6$; $H' = 17$; $L = 17$; $L' = 9$. Comparison— H (7.5) vs. H' (5.6): $p < 0.001$; L (6.8) vs. L' (5.7): $p < 0.08$.

The more intense the role conflict, the lower becomes the person's confidence in his superiors and the lower his respect for and trust in his work associates. Figures 15-3, 15-4, and 15-5 suggest that such consequences of conflict are more pronounced for introverts than for extroverts. Under severe conflicts the former have the lower confidence, trust, and respect for those around them. But what is surprising in this table is that in the relative absence of role conflict, introverts report at least as much confidence in their superiors, respect for the judgment and competence of others, and trust in their role senders as do extroverts.

In a supportive, rewarding social environment, independent persons (introverts) report congenial and trusting relations, but their relationships deteriorate more sharply under conditions of stress. The preference for autonomy becomes manifest primarily when social contacts

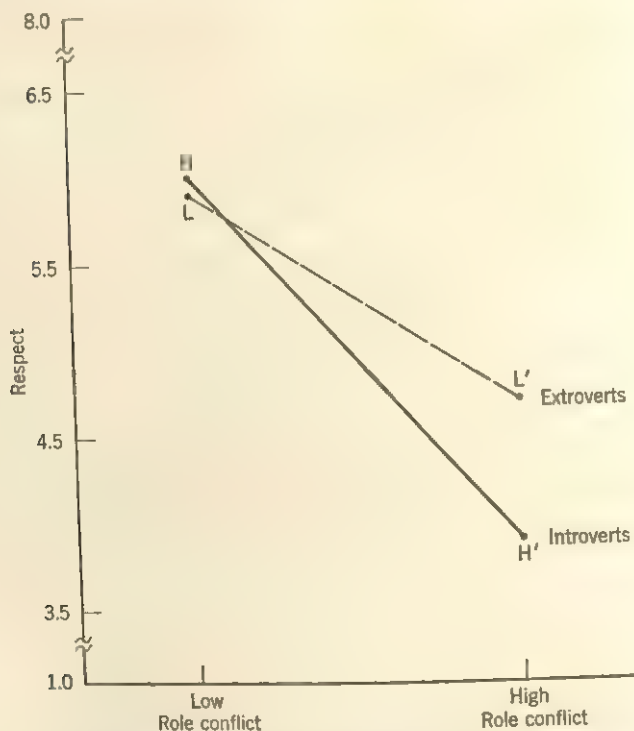


Figure 15-4. Mean respect for judgment and competence of role senders in relation to role conflict and extroversion-introversion (from the intensive study). N : $H = 6$; $H' = 17$; $L = 17$; $L' = 9$. Comparison— H (6.0) vs. H' (3.9): $p < 0.01$; L (5.9) vs. L' (4.7): $p < 0.07$.

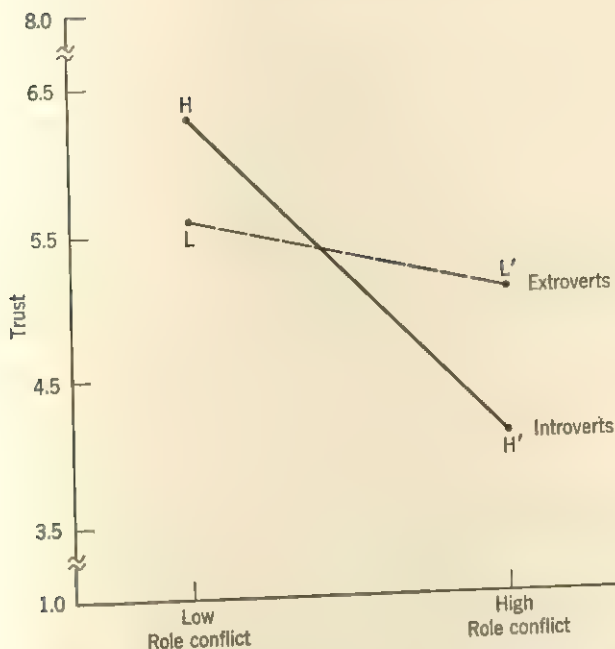


Figure 15-5. Mean trust in cooperativeness of role senders in relation to role conflict and extroversion-introversion (from the intensive study). N : $H = 6$; $H' = 17$; $L = 17$; $L' = 9$. *Comparison*— H (6.3) vs. H' (4.1): $p < 0.01$; L (5.6) vs. L' (5.1): *n.s.*

are stressful, that is, when others are exerting strong pressures on the person to induce a change in his behavior.

Others' Perceptions of the Person's Sociability and Independence

Let us turn now to the effects of the focal person's tendencies toward sociability on the way he is perceived by his work associates. Each of the role senders was asked to rate the focal person in his role set on a series of 22 trait-descriptive adjectives or phrases. A factor analysis of these ratings indicates that these perceptions cluster around five general dimensions, each representing a continuum along which the public image of the focal person may vary. From the information provided by this factor analysis, five Public Image Factor Scores were computed for each focal person, based on the averaged ratings of his role senders (Appendixes G and H). Two of these dimensions are espe-

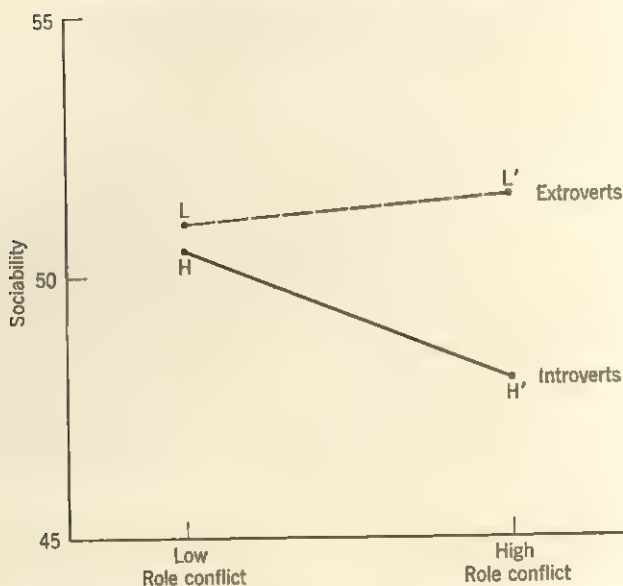


Figure 15-6. Mean sociability public image factor scores in relation to role conflict and extroversion-introversion (from the intensive study). *N*: H = 6; H' = 17; L = 17; L' = 9. *Comparison*—H (51) vs. L (52): n.s.; H' (48) vs. L' (53): $p < 0.09$; H + H' (49) vs. L + L' (52): $p < 0.05$.

cially relevant here: sociability (Factor V), and independence (Factor III).

We should expect, of course, that those who score on the introverted end of the Bernreuter measure would be rated by their associates as low on sociability and high on independence, and vice versa for those who score on the extroverted end of that scale. These expectations are confirmed by the data in Figs. 15-6 and 15-7, which also suggest, however, that the relationship holds only under conditions of high role conflict. Under low conflict introverts are reported to be as sociable as extroverts and no more independent than the extroverts.

Two dynamic processes are implied by these results. First, the trait of independence may be manifested mainly in times of stress and primarily toward those who are inducing the stress. A person may demonstrate tendencies toward introversion when social contacts are stressful, but may maintain quite congenial relations with others who are accepting and cooperative. This interpretation is entirely con-

sistent with the general pattern of results presented in Figs. 15-1 through 15-5.

Withdrawal from and avoidance of contacts with others is essentially a defensive tactic, a self-protective maneuver used only when social engagements are stressful or threatening. The introverted, conflict-free focal person communicates frequently and enjoys strong, close, affective bonds with his associates; the latter are given little reason to doubt his sociability or to feel that he is too independent. But under conflict he loses trust and respect for others, reducing his interaction with them and his susceptibility to their influence. It is precisely these responses to socially induced stress that cause him to be seen as unsociable and overly independent. This suggests that the sociability component of extroversion-introversion may not be a general trait, always operative, but rather a broad coping style used only in times of stress.

The second process follows from this and feeds on it. In complex organizations interdependence is a fact of life and interpersonal coordination is a basic requirement. As a result extreme independence

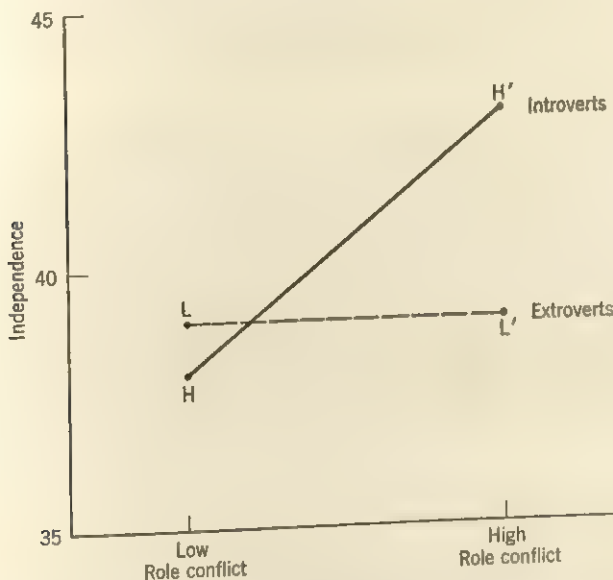


Figure 15-7. Mean independence public image factor scores in relation to role conflict and extroversion-introversion (from the intensive study). N : $H = 6$; $H' = 17$; $L = 17$; $L' = 9$. Comparison— H (38) vs. L (39): n.s.; H' (43) vs. L' (39): $p < 0.05$; $H + H'$ (42) vs. $L + L'$ (39): $p < 0.05$.

is generally seen as an undesirable, perhaps even unacceptable, trait. Role senders are therefore apt to exert strong pressures toward change on one who is seen to be too independent and lacking in sociability. Indeed, we find that three quarters of the focal persons with public images above average on independence are in the high conflict group, whereas less than one third of those who are below the median on perceived independence are subjected to high role conflict ($p < 0.01$). Those who are characterologically introverted are frequently seen as independent and unsociable and are subjected to considerable conflict. Those who are in fact quite sociable (in terms of the Bernreuter measure) are apt to be seen as such and are less likely to be subjected to severe conflicts.

Sociability and Emotional Tension

The greater sensitivity of introverts, as reflected in their withdrawal from others when under conflict, suggests that the personal costs of socially induced conflicts may be greater for them than for their more extroverted counterparts. Figure 15-8 indicates that this is indeed the case. Under severe role conflicts the introvert suffers a great deal of tension on the job; when his role is relatively unconflicted, he tends to be quite free of tension. Extroverts, however, reach neither of these extremes.

Most disturbing in this figure is the implication that introverts, who are more emotionally vulnerable to role conflicts, are also more likely to be subjected to such conflicts. Introverts are concentrated in the high-conflict condition of Fig. 15-8, whereas extroverts are concentrated in the low-conflict condition. This is all the more pathetic inasmuch as those same persons are capable of high degrees of confidence, trust, and respect toward others in the absence of stressful situations.

It would be erroneous, of course, to assume that the role senders of introverts take a perverse joy in hitting where it hurts. Rather, independence is often a doubtful virtue in conventional organizational units, which require a great deal of interpersonal coordination and achieve it by means of hierarchical control. As independence is too costly for the organization, withdrawal from others is therefore unacceptable, and the response of others to withdrawal is an intensification of pressures resulting in an increase in conflict. In the organizational context the major coping strategy of the introvert may be protective in the short run but self-defeating in the long run. Avoidance of one's legitimate role senders is untenable from the sender's point of view.

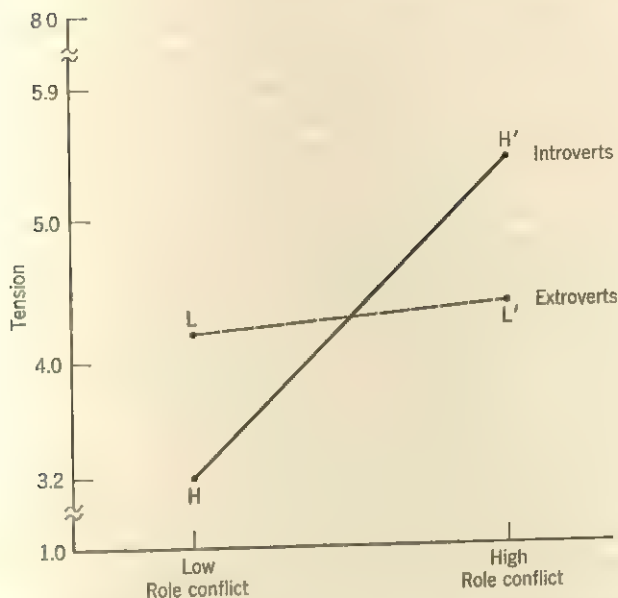


Figure 15-8. Mean tension in relation to role conflict and extroversion-introversion (from the intensive study). $N: H = 6; H' = 17; L = 17; L' = 9$. Comparison— H (3.2) vs. H' (5.4): $p < 0.01$; L (4.2) vs. L' (4.4): *n.s.*

The characteristic coping style of the introvert thus produces and intensifies a vicious cycle; the more he withdraws, the more he is seen as too independent. He is subjected to more intense pressures to change and to become more responsive; his emotional tensions are increased, and he is stimulated to further withdrawal. Unless he leaves the organization, his senders are eventually apt to block his coping efforts and put him in a bind from which he cannot withdraw, increasing his vulnerability to the emotional costs of conflict. Thus the introvert's very effort to reduce the conflict may bring it back to him intensified.

Consequences of Extroversion-Introversion

The material presented in this chapter indicates that introverted persons usually are recognized as such by their associates, that they communicate less, and maintain more fragile interpersonal bonds than do those who are more sociable. It might seem that the introvert is

disinterested in social affairs and has little need for his fellow man. Such a conclusion, however, would be much too simple and basically incorrect. A more appropriate interpretation, suggested by qualitative case material, might be that the introvert avoids others not because they mean so little to him but because they are so important to him.

The evidence from the open-ended responses of introverts under both high and low conflict suggests that their attitudes toward others and toward social relationships in general are idealistic. They are, if anything, asking too much from others. Their interpersonal needs seem to be unrealistic, not in their absence but in their excessive strength. If this is true, then any relationship which falls short of the ideal tends to be disappointing, sometimes distressingly so. Accordingly, those who score high on introversion tend to have strong (but generally covert) dependency needs.

The apparent paradox in this formulation is resolved if a distinction is drawn between inner needs and behaviors growing out of those needs. The introvert's behavior is akin to a common response of a person with excessively high achievement aspirations: he avoids serious tests which might result in failure. The person with very strong dependency needs often wants more of his associates than he can reasonably expect. Unless he is very skillful in interpersonal affairs or unless he has exceptionally warm and supportive associates, he is doomed to failure. Unfortunately, the introvert frequently lacks such skills, perhaps because he gives himself little opportunity to develop them. Thus he learns to avoid social situations which are likely to be frustrating and shows some reluctance to strike up casual conversations for fear of disappointment. While the introvert wants a great deal, he learns to expect little in the social realm. Introversion is often a posture of risk-avoidance: if pain is too often associated with commitment to and involvement with others, denial of the underlying need may become preferred.

Consistent with this picture is the account, oft repeated by introverts in the intensive study, of stress as growing out of faulty interpersonal relationships. Although those focal persons who tend toward extroversion list a wide variety of situations which may lead to stress, the introverts pointed persistently to disturbances in social relations as their major source of stress. The extrovert can be relaxed in his relationships because he is relatively realistic about them; he neither asks nor expects too much from them. The introvert, on the other hand, forms close relations with others only with great effort and under favorable conditions. He is more apt to have a few close friends

than many cordial acquaintances. Organizations generally require the latter and discourage the former.

The introvert is also unfortunate in his style of coping with stress, from the organizational point of view. Although the role systems of most industrial organizations have some flexibility, their success depends on the ability of role senders to influence the behavior appropriate to the roles. Withdrawal tends to curtail the effectiveness of such influence attempts and to reduce the likelihood that mutually satisfactory changes in the role demands can be found.

The discussion has concentrated on persons who show predilection for independence and a predisposition toward withdrawal as their basic coping style. But the results presented in this chapter suggest that withdrawal in the face of role conflict may be a much more general response; it is manifested, albeit in less marked degree, even by those who are extroverted. Many people turn to others for aid in periods of stress, but it is quite unlikely that they will turn toward those who are creating the stress. When one's associates are creating anxiety-provoking conflicts, few people will resist altogether a temptation to withdraw.

Summary

The many threads of evidence examined in this chapter suggest the same conclusion. The introverted personality is not necessarily incapable of close personal relationships with others; it is under stress that he reduces his contacts with them and becomes less susceptible to their influence. It is precisely these responses to socially induced stress that cause the introvert to be seen as unsociable and overly independent. Thus the withdrawn behavior that is commonly considered so characteristic of introverted personalities, in this context at least, is revealed to be essentially a defensive maneuver.

But coping by withdrawal tends to be an ineffective response, because role senders in an effort to control the introvert's behavior only intensify their attempts to influence him. It is significant that the introverted personality tends to be characterized by his co-workers not only as unsociable, but also as overly independent and autonomous. We may conjecture that his behavior, as he loses touch with his role senders, becomes more unsatisfactory to them. Thus we find that the introverted individual, particularly when seen by others as unsociable and highly independent, often faces strong role conflicts and suffers a correspondingly high level of tension.

Flexibility-Rigidity

MODERN INDUSTRIAL ORGANIZATIONS require two general patterns of behavior from their members. The first is characterized by such terms as stability, reliability, dependability, predictability, and responsibility. The "good member" is by these criteria one who accepts his responsibilities and meets them without excessive instruction or reminders, who abides by the rules and regulations with little enforcement, and who is not easily swayed from his organizationally defined course by expediency or selfish interest. Data in Chapter 9 indicated, for example, that in the organizations treated in the intensive study the normative expectations of respondents were in the direction of strict adherence to organizational rules and the application of universalistic principles in decision making. In short, the idealized organizational member internalizes his role and pursues it in an orderly, dependable fashion. He is a man you can count on to get the job done. An organization manned by such stable and dependable members "runs itself" with little need for close supervision and tight control.

But given our current rate of technological and social change, organizations also require another and, in some respects, quite different behavior pattern, a pattern typified by such terms as flexibility and adaptability. The good member by these criteria adjusts readily to changing requirements, fits into new groups and takes on new assignments rapidly, keeps abreast of the newest and casts off outmoded techniques, takes a fresh look at problems as they arise, and searches for better ways of solving problems. Stagnation and decay, rather than continued growth and development, are apt to befall the organization whose members lack adaptability.

Flexibility, Neurotic Anxiety, and Introversion

The dimension flexibility versus rigidity (see Factor III, Table 13-1) reflects this difference in required behavior patterns. Those who tend toward the rigid end of this continuum are likely to be stable, systematic, and self-controlled; those who are more flexible not only adjust more readily to change personally but may also help the organization find effective new patterns when new conditions arise. This dimension is directly relevant to the contributions members make to total organizational performance. It is also directly relevant to stress tolerance and to the involvement of interpersonal relations in coping behavior. For this reason, let us consider briefly the relations between flexibility-rigidity on the one hand, and introversion-extroversion and neurotic anxiety (treated in Chapters 14 and 15, respectively) on the other.

Figure 16-1 plots the loadings of the component scales of the flexibility and neurotic anxiety scales on a two-dimensional plane. The CPI measure of flexibility (used in the analysis in this chapter) loads .76 on the flexibility-rigidity factor, but very near zero on neurotic

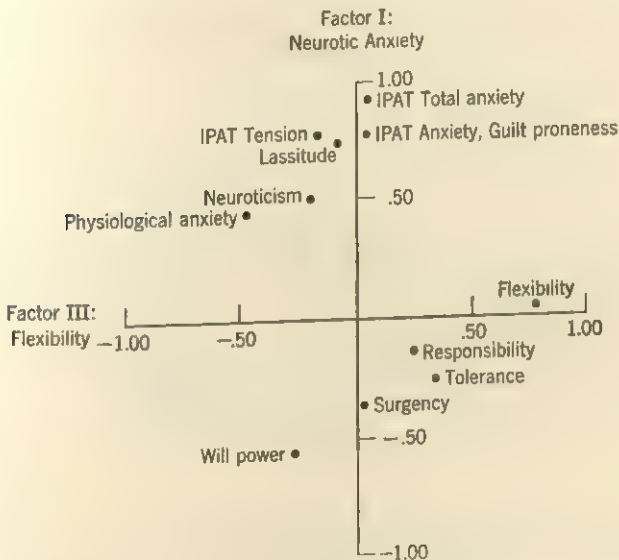


Figure 16-1. Plottings of personality measures on neurotic anxiety and flexibility factors.

anxiety. Similarly, the IPAT anxiety scale (used in the analysis in Chapter 14) loads very high on neurotic anxiety but virtually zero on flexibility-rigidity. For statistical purposes, flexibility and neuroticism are independent traits.

But those scales which load appreciably on the rigid end of the flexibility-rigidity factor split very sharply in their loadings on neurotic anxiety. The Bernreuter neuroticism scale and the CMI-Gurin measure of physiological correlates of anxiety show strong positive loadings, whereas the IPAT self-sentiment control or will power scale shows a strong negative loading on neurotic anxiety. The former two scales measure a decidedly anxious type of rigidity; the latter, will power, measures an emotionally stable type of rigidity. One might speculate that in the first instance the rigidity reflects a brittleness which stems from a precarious balance of conflicting motives held together by weak defenses, while the second type of rigidity stems rather from a well-integrated set of internal standards of behavior maintained by a strong system of defenses.

Figure 16-2 shows a similar pattern regarding the relations between flexibility-rigidity and extroversion-introversion. Once again the CPI flexibility scale loads near zero on the latter factor and may be con-

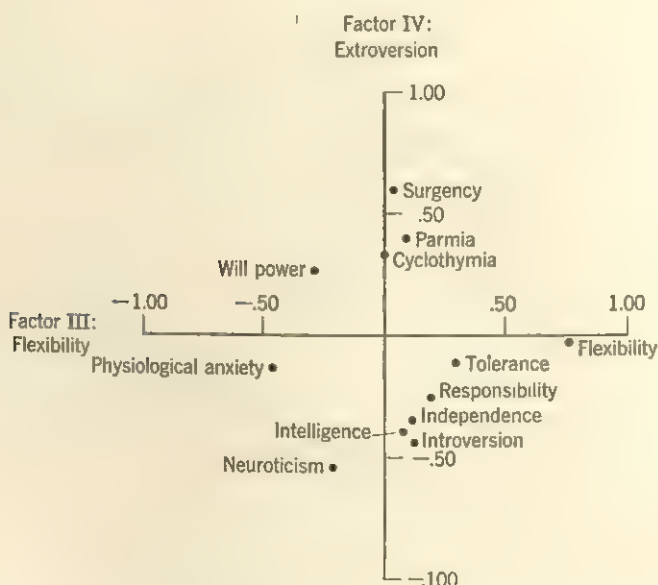


Figure 16-2. Plottings of personality measures on extroversion and flexibility factors.

sidered independent of it. And once again we find two types of rigidity—an introverted, unsociable, anxious type reflected in the Bernreuter neuroticism scale, and an extroverted, socially assertive, emotionally stable type measured by the will power scale.

Character Patterns of Rigid and Flexible Persons

Although flexibility-rigidity is most appropriately conceived as a continuum on which the total population might be expected to be distributed normally, for clarity of presentation let us consider the personality patterns of those at the polar extremes. Most people are, of course, characterized by some mixture of the two patterns; nevertheless there is an internal coherence within each pattern and a marked contrast between them. The distinction is well drawn by a number of seemingly unrelated works in the recent behavioral science literature.

Inner- versus Other-Directedness

Riesman's description in *The Lonely Crowd* (1950) of the other-directed person characterizes the flexible very well. The other-directed person sets his goals and guides his behavior primarily in response to the requests and reactions of those around him, and he is generally quite astute at reading their reactions. His adaptability stems from the fact that he is highly reality oriented in a world whose social and cultural reality is at the same time extremely complex and in constant flux. In such a world, circumstances and the opinion of others serve better than maxims as guides to appropriate behavior. For him, popularity and prestige are the major signs of success; fitting into social situations and going along with the group are his characteristic mode of achievement. Often adjustment to others takes on more importance than meeting one's own needs. In the extreme the flexible person has no "self" other than that which is reflected to him moment by moment by his associates. Most flexible persons fall far short of that extreme; nevertheless they strive to be "in tune" with those around them, readily altering their own thoughts and behaviors to fit those of others.

What is common to all other-directeds is that their contemporaries are the source of direction for the individual—either those known to him or those with whom he is indirectly acquainted, through friends and through the mass media. This source is of course "internalized" in the sense that

dependence on it for guidance in life is implanted early. The goals toward which the other-directed person strives shift with that guidance: it is only the process of striving itself and the process of paying close attention to the signals from others that remain unaltered throughout life (Riesman, 1950).

The nonanxious, assertive type of rigidity, reflected in the IPAT will power scale, might well be called "inner-directed rigidity." A person of this type tends to be self-confident, headstrong, guided by internalized standards of behavior. His major goals in life are set very early, and his modes of thought and action are systematically patterned to fit these goals. His code of behavior, composed of a more or less integrated set of principles and values, serves as a psychological gyroscope, keeping him on course in spite of contrary pressures from others. The rugged individualist, such as Frank Lloyd Wright, stands at the polar extreme.

But Riesman's treatment of the inner-directed man does not fit the anxious, introverted type of rigidity quite so well. This type of rigid does indeed behave in response to inner dictates, but they seem not to be the voice of conscience or principle as much as the demands of internal turmoil. A person overwhelmed with inner conflict, anxiety, or guilt is too involved with his own problems to entertain new inputs from his associates. His rigidity derives from fixation in the manner reminiscent of Maier's frustrated rats (Maier, 1949).

One might speculate that this latter state of rigidity is temporary, lasting only during the period of stress, and that everyone is potentially subject to it. When one's traditional coping procedures are inadequate to handle a particular period of internally or externally induced stress, he may persist in behaviors which are inappropriate to the situation, or fail to respond at all, falling into a state of immobilization. Thus it is perhaps inaccurate in many situations to conceive of the anxious type of rigidity as a characterological rigidity. The circumstances predisposing one toward states of anxious rigidity are apt to be the excessive demands of a strong superego coupled with defenses inadequate to cope with current environmental stresses.

Open- versus Closed-Mindedness

In keeping with their distinct styles of orientation, flexible and rigid personalities also have their characteristic cognitive systems and thought processes. Rokeach (1960) presents a comprehensive treatment of open- and closed-mindedness, based on field and experimental

work. The flexibility-rigidity dimension is a central component in this distinction.

The flexible person, according to this treatment, tends to be open-minded, ready to entertain new ideas and new experiences, and to drop old beliefs and preferences inappropriate to a situation. He is more concerned with having full knowledge about situations he is involved in than in having his beliefs conform to logical criteria of consistency. He finds it relatively easy to contemplate new and strange patterns of belief even when they are contradictory to his own, and he tends to be facile at integrating new knowledge into his cognitive system and at forming more complex syntheses of opinions and beliefs. He tends to be tolerant of others even when they hold opposing views. This pattern of open-mindedness is consistent with the other-directed orientation to life; it is also required if one is to live successfully with this orientation.

According to Rokeach's theoretical framework, the rigid person is by contrast closed-minded, dogmatic, and persistent in his ideas and attitudes. The internal values and principles which guide his behavior tend to be tied into a stable and highly structured system of beliefs. Clarity and consistency are primary virtues, and the rigid person tends to be intolerant of ambiguity * and of others who disagree with him. He wants to lead a neat, orderly existence free from confusion and change, and he is able to do so only by rejecting contradictory information or by accepting it and holding it in airtight isolation from the rest of his belief system. Thus in periods of rapid change he may be logical at the expense of rationality.

Moreover, the rigid person more than the flexible one is apt to maintain prejudices toward others at the expense of gratifying interpersonal relations and to maintain his beliefs in the face of contradictory evidence. He would rather be right than pleasant; he would rather be consistent than right. This pattern of dogmatic closed-mindedness nourishes his inner-directed orientation; it is also required if he is to maintain his inner-directedness.

The flexible person often tends to be somewhat indecisive because he struggles more extensively with his decisions. He tends to lack the rigid person's clear-cut decision rules. In addition, the complexity and variability of his belief system and his openness to new inputs from

* Sixty-seven per cent of the rigids and only 26 per cent of the flexibles in the intensive study sample score above the median on a measure of need for cognition, i.e., a need for well-structured, logically consistent cognitive experiences. Those who score high on this need tend to be intolerant of confusion and ambiguity (Chapter 5).

his environment lead him to deliberate over many facets of a problem before reaching a decision. If he seems disorganized, it is often because he is striving to organize a more complicated and less stable world. Extended procrastination may be the result.

The rigid person by contrast is often seen as decisive, disciplined, and tough-minded. He tends to simplify problems as they arise—to get to the heart of them quickly—and to process a solution through a decision calculus well grounded in stable and consistent values and principles. If some aspects of the situation do not tie into this process readily, they must be ignored (or distorted so that they will fit). Rigid persons are assumed to disapprove of delayed decisions, cluttered by considerations of tangential matters; flexible ones are more apt to disapprove of hasty decisions which fail to consider the full range of potential consequences.

Interpersonal Involvements and Authoritarianism

Social relationships take on a different meaning for flexibles than rigids. Were it not for the evidence presented in Fig. 16-2, one might expect flexible persons to be socially extroverted and outgoing, and rigid persons to be more introverted, but this is not the case. The other-directed orientation of flexible people might suggest that they are more dependent than rigids, but this conclusion is misleading. The interpersonal involvements of flexible and rigid individuals are characteristically different, but in a more complex fashion than amount of interaction or degree of dependency.

The flexible person tends to have strong needs for inclusion. He wants to be deeply involved in whatever is going on and to participate in planning, decision making, and action along with others. He has a strong team orientation and, though he is tolerant of differences in perspective and belief, tends to see such differences as a challenge to finding an integrative solution or synthesis which will be gratifying to all. He wants neither to offend nor to exploit his associates and he wants others to treat him in the same way. "Fairness" is a primary criterion of appropriate behavior toward others. He expects others to be considerate and cooperative and in return he is attuned to helping them meet their needs. He generally finds it very difficult to say "no" to their requests; he wants to be accepted and liked by them.

The relationship he seeks with his associates is one of collaboration and colleagueship—a peer among peers—and in each relationship he wants to be involved in the other person's total life. Consequently he tends to become involved in a complex set of relationships which

are, at least superficially, intimate and marked with interdependence. His dependency on others may be strong, but it is a diffuse dependency on the total group, and he tends to see others as having the same kind of dependency. He thus has a compliant, acquiescent orientation toward the group and tends to conform, at least verbally, to its wishes and demands.

The rigid person is oriented more toward status and authority than toward collegueship. His involvement in others tends to follow the father-son model more than the sibling model. His relationships tend to be dependent or counterdependent—he wants to control or be controlled, to be master or servant. Thus his dependency tends to be selective. He may form a strong identification with—an almost total commitment to—a charismatic figure to whom he gives wholeheartedly and from whom he wants love and appreciation. In any case his dependency is linked to power and authority; he accepts direction and control from legitimately designated superiors and tends to reject influence from peers and especially subordinates, particularly if they disagree with him on matters of principle or basic belief. The primary criteria for judging behavior directed toward others are legitimacy and propriety.

A number of conceptual issues are raised dealing with dependency, influence, and conformity. It is perhaps clear by now that the flexible person, while being other-directed, is not necessarily highly dependent on others. He is open to influence but not necessarily to control, and that influence is apt to come from many directions. The rigid person, while being generally inner-directed, may be extremely dependent on another person, usually his supervisor or some other superior. He may be subject to extensive control by that person, but open to very little influence from others. The flexible person prefers a relationship of mutual influence and shared decision making, whether the other party is above or beneath him in the hierarchy. The rigid one, on the other hand, prefers to make autocratic decisions regarding his subordinates and to control their behavior in keeping with these decisions, but he would see it as inappropriate to try to influence his superiors' decisions.

The issue of conformity is also somewhat complex. Superficial behavior patterns would tend to suggest that the other-directed, flexible individual is more conforming than the inner-directed rigid individual. We have noted the compliant orientation of flexible persons. However, this may be as much a façade as a behavioral tendency. Since he wants the love and acceptance of others so much and since he finds it so difficult to reject others, the flexible person may pay lip service

to compliance even when he cannot or will not comply. He tends to promise things which he does not subsequently deliver. There are several reasons for his frequent failure to come through. Since he does not see norms and requirements as inherently stable and right, he takes these commitments less seriously than does the rigid person. Since he is open to so many requests and influence attempts, and since he is trying to satisfy so many others on so many issues, he soon finds himself committed to far more than he can accomplish. Finally, since he often cannot find it in himself to say no, he sometimes agrees to performing actions which are beyond his capabilities.

The rigid person is apt to conform in deed as well as in word (Tuddenham, 1959). He conforms more than the flexible one to general cultural norms because these have become so deeply entrenched guiding principles. His conformity to the rules and regulations of the organization and to the requirements of his particular office is apt to be more dependable than is that of the flexible person. Dictates from authority figures are taken seriously and are immediately internalized. Several studies (Crutchfield, 1955; Beloff, 1958; Millon, 1958; Nadler, 1959; Wells, Weinert, and Ruble, 1956) have demonstrated associations between such authoritarian tendencies and behavioral conformity. Finally, since he is less open to influence generally and since he tends to reject inputs inconsistent with his own principles and beliefs, the rigid individual seldom commits himself to anything which he will not follow through. Thus he tends to be both more and less conforming than the flexible.

The descriptions above of the flexible and rigid character patterns are, of course, overdrawn. Most people fall somewhere between these two poles, having some of the attributes of each and few of these attributes to extreme degree. In the following analysis the intensive sample has been divided at the median on the CPI flexibility scale into *relatively* rigid and *relatively* flexible groups. Few of the subjects closely approximate the flexible or rigid prototypes sketched above, but the two general patterns are evident.

Occupational Interests and Involvements

Given the character differences of rigid and flexible persons, it is not surprising that they are typically found in quite different kinds of occupations. The most rigid quartile in the intensive sample consists of two accountants, an economic forecast analyst, an administrative assistant in a medical department (supervising those who handle

medical records and statistics), two work standards (time and motion study) engineers, an assistant plant engineer, two superintendents of assembly-line departments, and foremen of inspection and maintenance groups in production plants. In the most flexible quartile are found two personnel managers, a coordinator of a service function, two research administrators, managers of special staff departments, a supervisor in an engineering division, and general foremen and foremen in production units.

The Flexible Pattern of Involvement

When asked what he looks for in a job, what makes it a good job for him personally, one quite flexible manager responded:

Well a job—well, such as I have now—that brings me into contact with people, gives me a certain degree of authority and responsibility, and is far from routine, always something new developing, something new every day, and working with essentially pretty congenial decent people. I like working together with people as a team, as a coordinated group.

I think the fact that I'm dealing in, well, an extremely interesting business—a fascinating business—growing all the time, dealing with situations all over the world, in some pretty strange places—that makes it interesting and a joy.

I couldn't stand a general routine job. For example, I could never take a job dealing with figures all the time, such as an accountant. I don't think I could take that at all.

Another flexible person in a middle management position reports similar values in response to the same question:

Well, let's say the challenge which a job offers would be very important to me. I wouldn't be happy in a job that was uninteresting, or a job that was completely repetitive all the time. This would annoy me. I just couldn't stand that. I wouldn't like a job that was completely routine. There has to be a certain amount of routine in every job, I'm aware of that, and the routine doesn't bother me. I don't mind doing a routine job, but I wouldn't want to do a routine job all the time.

I would say the opportunity to meet other people is very important to me. I have gone to IBM school and have taken all the programming courses, all the machine courses, but I could never go in for being a programmer. Never, although I think I could do the job very satisfactorily. But I would never do this job because it's a job in which you sit in a room and make a lot of decisions which affect a machine. You have very little opportunity to talk to people and there are people who are very interesting to talk to.

A highly flexible production-line foreman is less happily placed and tells of even stronger desires for variety:

Q: What makes a job good for you?

A: A nice place to work at, good fellas to work with, good boss. In general, working conditions. . . . Put in decent wages too.

Q: How do you feel about your present job in these respects?

A: I can take it or leave it.

Q: How do you mean that?

A: I don't think much of it.

Q: What parts of your present job do you find most satisfying?

A: My paycheck twice a month, paid vacation, and we work overtime for overtime pay.

Q: What parts of your job do you find least satisfying?

A: I have to get up and go to work in the morning.

Q: If you could change your job so that it could be more satisfying to you, what would you have changed about it?

A: Well, I like to try different jobs. I like to shift around a little bit. What I'd like to do is have more than one job that I can shift around on.

Q: Why do you think you'd like that?

A: Well, when I was an hourly worker, I never stayed on one job over six months. I was always in a large department, so every time I started to get a little bit tired of my job, I went in to see my boss, and I'd say "I'm tired of this job. How about another job?" Maybe I'd get an easier one, maybe a harder one, but that didn't make any difference. It's just the idea that I wanted a change. I'd go all over the department that way. You learn a little bit on each job and you get to meet different people that way.

Q: What are your chances of changing around like that now?

A: There aren't any chances. There is no variety in this job.

This flexible foreman finds himself in a rigid department of a rigid organization, and his former mode of gratification, frequent changes in assignment, is no longer available to him. All he finds to look forward to is paycheck and vacation—an unhappy lot, indeed, for his particular personality.

Another flexible manager has a broader and less self-centered view of change. He is ready and willing to change himself:

The amount of knowledge required to do a job wouldn't frighten me too much. I've never had any problem in learning anything I wanted to learn. I have a pretty good technical background to master any subject. I have no fear of not being able to learn something. So if a new job or a new responsibility requires me to do things differently, I'll learn what's needed and I'll do it.

But he considers more seriously the extensive and complicated implications of major changes. When asked how he might redesign his job to make it better for him personally, he replies:

That's a very tough one to answer because it would involve changing completely the policies under which we operate. This job has just grown over the years into what it is today. I can think of many changes I'd like to see, but I'm not sure they would be good changes in the long run.

Change for the sake of change isn't necessarily good, that's what I'm trying to say. There might be changes that seem to make your operation better, but you're not quite sure what the effect would be on the overall picture. You have to move carefully. I have a personal opinion that the way we operate could be improved by many changes . . . but you have to educate top management on what you're trying to do.

We're actually changing all the time. We don't operate like we did five years ago. We're going toward some of the things I'm talking about. I would just like to go faster. I'm talking about a revolution and maybe a revolution isn't the best way to go, but I think we're evolving a little too slowly.

Now, we *do* change. We have a great deal of authority in our operations here. We can make a great many changes. Only when we get into policy problems do we have to go to our management. As far as our every day operating problems are concerned, if I can see a way to do our job easier I wouldn't hesitate to adopt it. The only thing I'd have to be careful is that in making my job easier, I didn't make someone else's job harder.

This manager wants change, actively initiates change, and is dissatisfied when changes he cannot initiate personally are slow in coming. But he is also considerate of others when making changes and is concerned about the long-range, organizationwide implications of the changes he advocates.

The protocols cited above mainly stress the flexible person's interest in a job involving variability of day-to-day experiences and opportunity to explore new areas and to innovate. They also hint at the importance of close, equalitarian involvements with others. When asked what kinds of personal characteristics are required to be good at his job, a flexible foreman answered:

Well, you have to get along well with men. That's the biggest thing. Of course, that boils down to knowing how to treat this one and that one. And that doesn't include just your own men. That includes the boss, the maintenance men that come over and work on your machines, even down to the janitor. You can't treat every person alike. Some people

you got to treat one way and some people another. But everyone's a human being with his own wants and his own problems. You got to work with them without hurting their feelings, so they'll work with you and do it willingly.

A higher level manager reveals a similar orientation:

Not only in my job but in the jobs of people below me, you need to exercise a good deal of diplomacy in handling people. If you don't, very soon you won't be able to do your job well. If you antagonize people, they can make your job very difficult.

We work for a lot of people and, although this is more or less a functional relationship, some people seem to feel that they have authority over us, which they don't have. We have to be diplomatic about this. You are not just going to tell a fellow that you're not going to do what he suggests. You have to try to go along or else point out that it might not be in the company's best interest. You have to be very diplomatic. You can't hate a guy, you know.

Most people are cooperative if they understand your problems. When you have gradually educated them over the years as to what your problems are, they will have confidence in you. They are only uncooperative when they don't understand your problems. Of course, you have to understand their problems too.

The following quotations from the same man indicate that his equalitarian concern for mutual understanding pertains to superior-subordinate relationships as well.

When a man gets to be a top executive in this company, the people around him have a different feeling toward him. It isn't respect—I mean, they defer to his opinion. I think it's a bit ridiculous in some instances. He's only a man the same as they are. He's gotten there because he has certain abilities that are valuable to the company, but he's not infallible. He makes errors and he's probably the one who is most aware of it. He doesn't expect people to treat him as though he were a general in the army and bow down and kiss his feet, but they have a tendency to do this. Any demand that he makes is taken to be gospel and authority and they're afraid to go back and talk to him. Many times, if you talk to these men (top executives) and explain your problems to them, they are quite willing to go along with something quite different than what they originally asked for, they are usually quite reasonable. They don't want to be treated like a little tin god.

I wouldn't want to be treated that way by my subordinates. I like to be able to talk to people directly, find out what they're thinking. With some people I have a very easygoing relationship and with others not quite as easygoing. Some people will tell you their personal problems and things—

others are more reserved. But I don't think anybody who works for me would feel scared of me and not tell me when they think something ought to be done another way than the way I suggest. I wouldn't feel I was doing a good job if they were afraid to make suggestions. I work for them more than I think they work for me.

This man's interpersonal attitudes, shared with other flexibles, are decidedly nonauthoritarian. On the job he wants equality and close personal relationships of mutual understanding and consideration.

In sum, the flexible person's style of organizational involvement centers around variability of experience, opportunity for introducing significant change, and development of colleague relationships. He wants to avoid routine, to make the system better, and to be personally involved in the lives of others.

The Rigid Pattern of Involvement

The job preferences of rigids, as seen in the positions they hold as well as in their expressions of interests, are quite different from their more flexible counterparts. In place of variability and opportunity for change, the rigid person seeks a highly structured, consistent, orderly and stable situation; he wants to have assigned to him well-defined tasks which can be completed on schedule. A rigid foreman responds to a query about what kind of work he likes:

Something more or less of a mechanical nature. I like to sit down and analyze problems—maybe functional or mathematical problems—and work things out in detail. And I like making suggestions to an individual, helping him understand the situation. I like to have a feeling that I'm useful and that I'm getting things done.

When asked what he would like to have changed about his job to make it better for him personally, he replied:

My activities are coordinated by my superior who gets his instructions from above. They handle any changes in my job.

When the question was repeated he responded:

I wouldn't want to have the job changed just to make me happy.

Continued discussion along these lines revealed a perception that change comes from the outside; one shouldn't generally initiate it himself even

though others often do. Requests for changes in the way he does things are taken seriously only when they come from superiors, and the superiors, *of course*, have the final say. He was asked how often he initiates changes in his own activities:

No sir, I do not. Any major changes are handed down to me by instruction. Certain type jobs may carry on in the same method and in the same procedures, but that doesn't mean that they will carry on indefinitely because the model changes and the operations change. We *have* to change for those because that is what's required and is necessary. Personally, in my opinion, any man who is that stubborn to stick to one golden rule and thinks he's the only one that's right, he's *wrong*. We can all learn something new every day. I know I do. But that doesn't mean we have to have a lot of changes all the time. I know that changes have to happen, but we shouldn't have any more than necessary.

A rigid accountant presents a somewhat different picture. When asked what he looks for in a job, he replies:

Well frankly, the type of work I'm in right now is very interesting, and I like it because I deal with people more than I think others might in the accounting field. I'm dealing with people in other departments within the corporation. It's interesting work. Not too routine by any means.

But further analysis of his responsibilities reveals a great deal of routine. In fact, his contacts with others are confined to a limited range of topics and in which his role is generally quite well defined. When it is not, he tends to have trouble relating to people. He does not mention the interpersonal aspects of his job when he is asked what aspects of the job he finds most satisfying:

Well, we must present good work accurately and meet time schedules, putting out a good job, a neat piece of work. I do take pride in it and in a group who performs that kind of work.

Few of the rigids would be apt to admit liking routine work, but they tend to be found in such jobs and to like its orderly, systematic aspects. What their more flexible counterparts might find boring and fatiguing, they find stimulating and interesting; sufficient variety for them may be found in the constant flow of numbers and paper work and in maintaining the system according to the rules and regulations.

Significant interpersonal involvements for rigid persons tend to be

vertical rather than horizontal in the organization. They are closely oriented to the needs and desires of their superiors and to their responsibilities in supervising their subordinates. Peer relations are pushed to the background. Although several of the rigids in our sample speak of the need for getting along well with people, this tends to mean avoiding dispute and failing to offend them. One might say that they want to be able to get along well beside people, rather than with people.

But just as rigid persons underestimate the significance of peer relationships, they overestimate the importance of superior-subordinate relationships. They tend to hold their immediate superiors somewhat in awe, and more distant superiors are sometimes faced with dread. The accountant, quoted above, says:

There is something (that creates stress), and I think it's just because of my personality. I find it difficult, let's say, if I should have to go up to the office of the president or the vice-president. I just don't know why because in my foreign assignments years ago I was right in with top echelon, not only in a business way but socially. Since I've been back in the States, I feel a little bit of fear to be in the presence of top management.

Q: Do these situations arise with enough frequency for it to be an occasional source of difficulty?

A: Oh, no. As a matter of fact I have never had the occasion since I've been back to go to the office of the president or the vice-president. I have not had to face them for any reason whatsoever, for business or otherwise.

Q: Has it happened in the past?

A: No, it hasn't happened in the past. I don't know why I mentioned it, it just came to mind. That could be one thing that bothers me.

Rigids generally feel a deep sense of responsibility to their superiors. They want to be respected and appreciated by them and to do the right kind of things for them. Demands from above are generally unquestioned, but even when they feel critical of a superior's actions, the criticism is unspoken. One rigid administrator experienced considerable conflict when his supervisor asked him to do a personal favor. The request was conflict arousing for two reasons. First, it was illegitimate—contrary to company practice to which the rigid person feels a deep conviction. Second, he was being asked to do something which was beneath his status and position. But nonetheless he silently complied. In another more work-related case in which he could cite company policy in his behalf, he resisted his superior's requests quite stub-

bornly, but this he cited as a break in his generally respectful and deferential attitude toward his superior.

The strong identification with his superiors and with the official goals of the organization, together with the heavy emphasis on authority relations, leads the rigid person to a rather complete internalization of his role. His role tends to become his identity. While the flexible person may be in the course of the work day a manager, friend, personal confidant, sports fan, and explorer, the rigid person is a *manager*. Period! If his various roles in life require him to be different, he keeps those roles in isolation from one another; and heaven help him (and her) if his wife shows up at the office.

The principal mode of involvement in the organization for the rigid is almost total dedication and commitment to the responsibilities which have been duly assigned to him by his superiors, the official agents of the organization. And he has a strong preference for responsibilities which are well-defined, mutually compatible, and relatively stable.

Stresses of Flexibles versus Rigids

Let us turn now to the implications of flexible and rigid personality patterns for personal adjustment to organizationally induced stress. Given the differences in style of involvement, in needs for structure, and in attitudes toward authority, it is not surprising to find that flexibles and rigids are typically confronted with somewhat different kinds of stress, that their emotional reactions to stress are different, and that they use somewhat different methods for coping with stress.

Sources of Stress for Flexible Persons

The other-directed openness of the flexible person makes him extremely vulnerable to problems of role conflict. Unfortunately, he is also more likely than the rigid person to be confronted with such problems; the average score of role conflict for flexibles in the intensive sample is significantly higher than for rigids ($p < 0.05$).

Among the most common kinds of conflict for flexibles is role overload. The following case material makes this quite vivid. A question put to one flexible executive about what he finds least satisfying in his job led to the following exchange:

Well, probably the fact that there's just so much of it. There's just so much to do and so much going on that sometimes it's a bit difficult to keep up and keep all these things in your mind.

Q: Do you feel that your job imposes more pressure and stress than most other jobs do?

A: Yes, I do.

Q: What are the circumstances which engender the most pressure and stress in your position?

A: Deadlines, I guess. I don't seem to have enough time to do it. Things seem to be required overnight. As a result you are working on one, two, three, or a half a dozen things at one time and all with deadlines to meet. I guess that's when most of the pressure results.

Q: Why are these tight deadlines set?

A: It's difficult to say. Maybe, sometimes, a lack of appreciation of just what's involved to get the job done. You know, somebody up top has a brilliant idea and says, "Look, I'd like to have this done, get it to me by next Wednesday," and this goes on down. There's no very good reason for it at all. Or, you might have one particular person who'll have you set a deadline which is fairly reasonable by itself. Then you have somebody else from an entirely different part of the company wanting something done or some information and he sets a deadline, and so on. Then you have four, five, or six of them. A little at a time wouldn't be bad at all, but doing them all in a required period makes it a bit difficult. Yet the first fellow has no idea that it was an unreasonable deadline, and actually it wasn't. But you get two or three more and you build up to something. Each one by itself wouldn't be unreasonable at all.

A flexible supervisor of engineering tells a similar story:

Q: How much pressure do you feel toward doing more work?

A: Well, I think that with the present administrative rules and the present work load, I could probably double my staff and not be over-strength. The pressures are terrific. It gets so bad at times I become mesmerized by the demand—to the point where everything becomes so vital, so insistent and necessary that it reduces everything to the same common denominator again.

Q: Now, does this make it hard for you to establish priorities among tasks?

A: Tremendously so, because we have a very strong conflict at all times between the plant's immediate needs and the information required by the staff's service group. The staff needs are so great that sometimes we are reluctant to stop doing what we're doing to reason with the plant. And once again, the information they (central office or division staff) request could be of ultimate assistance to the plant, if we had people in the proper spots to function as they should. The way things are, you just can't satisfy everybody.

Another flexible manager is similarly distressed by overload. When asked about pressures on him, he says:

Well, there are plenty on me personally, as manager of the division. Our department manager, who is getting it from the manager of the marketing organization, gets on us. We get it from the field division managers too. Now, I have contacts with all of them both by formal and informal means, telephone calls and things like that. Then the manager of the marketing department puts pressure on me directly too. So, you see, there's pressure coming from all levels and in many ways. I think what you are seeing here is something that has me just a little bit concerned. Is this an efficient way to run an organization, when pressures can be generated from so many different sources and from so many different people that hit me directly? I think it's a valid question. I don't know the answer to it either.

In all of these cases the men are overloaded because inputs come from so many directions. The fact that they are flexible and responsive to influence from others invites multiple pressures. One might expect role senders to avoid or discontinue exerting strong pressures on those who will be little influenced by them (i.e., rigid people) and to direct their pressures toward flexible persons who respond more readily. Flexible persons may be under pressure not because their work is inadequate or inferior but because of their very openness to influence. One man says of himself:

On occasions I'm a little too easy, I think. Sometimes I find myself, perhaps, a little too sympathetic. Subordinates and other people in other organizations too are always trying to get me to do something.

Q: What has this sympathy led to?

A: Well nothing serious, except it's taken a little bit longer to get something done as a result of that. Just because of a reluctance to pull out of a situation or to say "no" to a request, I take on too much. In fact, I was told, at one time, that I didn't throw my weight around enough, that I ought to be giving it (pressure) out more and not just taking it in all the time.

In the extreme flexible persons are perhaps too easily influenced by various associates. Then each role sender imposes very strong pressures in an attempt to obtain from the person some semblance of stable and appropriate behavior; and when each of them defines "appropriate" in somewhat different terms, conflict or overload is the result. As we shall see, the characteristic coping methods of the flexible person unfortunately do little to turn these pressures away.

Flexible individuals are not merely victimized; they frequently play an active part in generating the overload. Their interest in variety and

innovation and their general expansiveness leads them to undertake many tasks which are not specifically required by others in the organization. In addition to being "fall-guys" for work imposed by others, they tend to overload themselves. Their jobs continue to grow until their capacities are overtaxed.

There is still another source of stress for the flexible person, which is often dynamically related to problems of overload. His strong needs for recognition and appreciation from others implies a tendency to react with anxiety to overt acts of rejection or exclusion. The possibility of rejection may be sufficiently threatening to lead him to a relatively unquestioning acceptance of influence attempts, and to the avoidance of coping techniques which might offend others. Thus he sometimes winds up between the devil of overload and the sea of rejection by associates whose acceptance he needs.

Sources of Stress for Rigid Persons

In complex industrial organizations the rigid person is also faced from time to time with problems of overload, though generally in less marked degree. But the source of overload and the nature of the resulting stress appear somewhat different from those of the flexible person. Rather than coming from the cumulative pressures from many role senders, the rigid individual's overload more typically derives from rush jobs handed to him from above.

Deadlines and time pressures are unreasonable to him when they interfere with an orderly process for completing his assignments. A "quick and dirty" job violates his standards of precision and excellence. Too much rush leads to errors and inconsistency, for which rigids have little tolerance. Consider the case of a rigid comptroller:

Probably the most frustrating part of my job—I don't know if it's because it's so specialized or whether our responsibilities are so confused or what—but many times we are called upon to give our comments on some special project on relatively short notice. For example, we were called upon to indicate how we felt about the proposed draft of a new service agreement. We had very little time to give our comments, to study the problems, to look in at all the angles. I have to hand things like this out to each of my people because I don't have time to go over them in detail. It has to be a quick look. To me this is personally very frustrating. I always feel that we could give better comments if we had more time.

Q: How much pressure do you feel for turning out higher quality performance?

- A: Well, let me put it this way. I personally set very high standards. It's my nature to do things the hard way, so I probably feel more pressure for quality than is perhaps required. I feel a great deal of pressure, but most of it comes from myself.
- Q: Where else does it come from?
- A: Well you see, when I do something, I'm trying to anticipate the standard of quality that I would like to have if I were in my boss's position. I guess that somehow I've never gotten over the feeling that the quality of the work doesn't quite come up to what the boss expects I feel personally responsible for it. He doesn't really direct much pressure toward me, but you feel all the time that he could and you anticipate this.
- Q: How much pressure do you feel toward doing *more* work, toward turning out a greater volume of work?
- A: Let me put it this way. We are so swamped now that I feel an extremely high degree of pressure. I wouldn't want to look for anything beyond what I have now.
- Q: What's the source of this pressure?
- A: It's a combination of added work—extra responsibilities which have been passed on to us—and too few people. And the people we have are new and untrained. Yet, it's the constant review of things passed down to us. The constant committee meetings, and so forth. I realize that the proposals and that sort of thing that we get in are generally thoroughly thought out by others before we get them. Yet, I feel we never get adequate time to review these things. When we get a lot of these things, it's the most frustrating thing I can describe to you. We have a heavy work load and not enough time to do things really well. It's a very frustrating experience in that regard.

In another part of the interview he comes back to this theme:

The thing that makes this job bad for me right now is, we don't have adequate time to spend studying a problem and looking at all the angles. This is frustrating because I think it's possible to do a much better job. I realize you have to have a time factor in order to get a job done, but I don't like having to make decisions without thoroughly understanding the situation.

The answer to this problem, he thinks, lies in better organization. In response to the question about redesigning the job to make it more satisfying personally, he says:

There is somewhat a lack of organization in our internal administration within the group. I'd like to see things running and functioning smoothly, and I think it can be done so. It's very frustrating to find these little things that come up which would go through as a matter of course if we

had a proper internal organization. I guess I hate to get caught short on anything, whether it's time-wise or finding a responsibility to be handled that I should have known about.

I've been trying to find some permanent solution to this routinizing of procedures. I like to know at all times what I'm doing and where I'm going. These little things tend to confuse me because they throw me off the track. We need to set up some procedures, just little control mechanisms and so forth, so when things come in that have to be dealt with, we'll have the time to review them properly.

Comptroller's problem might well be conceived as overload, but it is quite different from that which is so common to flexible respondents. He is not confronted with the task of responding to a variety of requests coming from many directions; virtually all of the requests that he takes seriously come directly from his superior. But because he takes those requests so seriously and because he sets higher standards of performance for himself than does his superior, he finds himself with insufficient time to do the job properly.

Another supervisor in an accounting department reports a similar story, stressing even more the extent to which time pressures interfere with orderly work and lead to substandard performance. To the question, what leads to feelings of stress in his job, he replies:

Well, things that bother me considerably and cause stress, so to speak, are the amount of errors we see other people making in the company, in particular the data processing center. It's giving us a terrible headache. . . . Of course some of the errors we find are caused by people in our own department. And they say, "Would I please explain it because we don't have a manual to use like we used to have." We don't have a manual because we haven't had time to prepare it. We're spending too much time just correcting the errors we've found.

There's an example of errors that create more work and more errors and more work. It's a vicious circle—until you can work out the manual there are going to be mistakes made, and the mistakes make work that stands in the way of making up a manual.

This man indicated, as did several other rigid persons, that he disliked being dependent on others, particularly those beyond the boundaries of his department, to get a task completed. He would rather do it himself and make sure that it was done right. But he also wanted to have enough time to do it right.

We have already noted that rigid individuals tend to score high on a measure of need for cognition. In both of the interviews cited above, the problem is intensified by the fact that the situation is not struc-

tured clearly; responsibilities are not sufficiently clearly defined, and there is a lack of order in the routine. Several other rigids reported similar complaints. Therefore a second and related source of stress for rigids is ambiguity, not because their roles are more ambiguous than most, but because they have so little tolerance for ambiguity.

Emotional Reactions and Coping Responses

Results presented earlier have indicated a strong tendency for role conflicts to generate emotional tension and dissatisfaction with the job. But this consequence does not follow for all people. Figure 16-3 indicates a very sharp increase in tension under conflict for flexibles and no increase in tension for rigids. That is, those flexibles who face little or no role conflict experience very low degrees of job related emotional tension, while flexibles in high conflict roles suffer a great deal of tension. Rigid respondents, by contrast, demonstrate a moderate level of tension on the average whether they occupy high conflict roles or not.

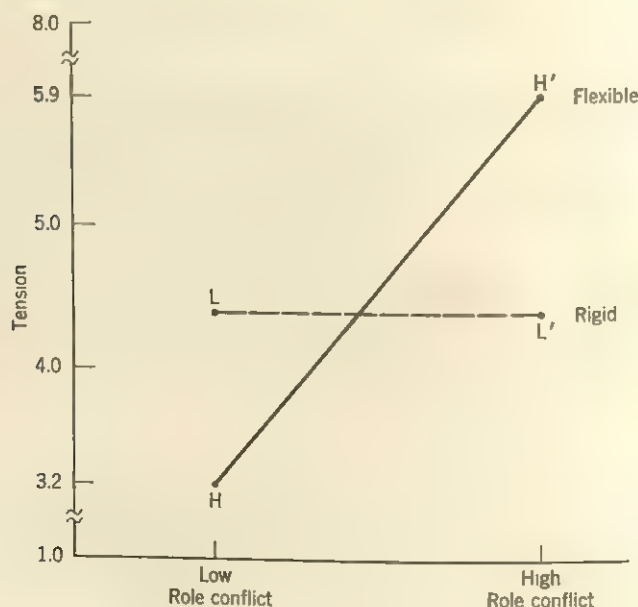


Figure 16-3. Mean tension in relation to role conflict and flexibility-rigidity (from the intensive study). N : $H = 8$; $H' = 11$; $L = 15$; $L' = 15$. Comparison— H (3.1) vs. H' (5.9): $p < 0.001$; L (4.4) vs. L' (4.4): n.s.

This finding coupled with one presented earlier presents us with a cruel paradox of organizational life: those who suffer most under conflict (flexible people) are most apt to be in high conflict roles. But the irony is more easily understood, if not justified, when one considers the broader scope of emotional reactions and characteristic coping responses of flexibles and rigids.

There is no detectable increase in tension for rigids when confronted with conflicting role pressures. This may mean either of two things. The role pressures (which constitute the conflict) may not get through to the rigid person. While the pressures exist in the objective environment, they may not generate forces in his psychological environment, and thus produce no increase in tension. Second, the objective conflict may induce a psychological conflict, but for rigids this gives rise to some affective reaction other than tension (as measured here) or to no change in affective state.

The emotional styles of rigid and flexible people tend to fit—to support and be supported by—their styles of thought and behavior. If the rigid's conceptual framework and standards do not fit the situation, the situation must be wrong and must be rejected in favor of his internal dictates. The flexible person is more apt to assume that if his expectations do not fit the situation, he must have expected wrong. For one, the environment must be altered to accommodate the person; for the other, the person must alter his behavior to adjust to the environment. The rigid is therefore judgmental about the environment, particularly about other people in it, whereas the flexible tends to be accepting of the environment and judgmental about himself.

When there is a clash between the person and his environment, as in situations of role conflict or serious overload, the direction of affective expression is similarly different. The flexible turns his tensions inward, worries about what is in store for him and what he can do to make things right. Thus in times of stress the flexible person demonstrates a high level of *manifest* anxiety; emotional tension is quite evident. The rigid person may direct his tensions outward when he is involved in a clash with the environment.

Rigid Coping Styles

The coping strategy of the rigid person is frequently linked to this emotional style. When inputs from the environment (e.g., role pressures toward change) are bothersome or disruptive, the rigid tends to reject them. This is generally true of information inconsistent with his attitudinal preconceptions or cognitive framework. Rejection of

such information denotes closed-mindedness, which at times requires a substantial denial of reality. Overt influence attempts from others in the organization meet with similar resistance and rejection, frequently with considerable aggressiveness, unless, of course, the influence comes from legitimately designated superiors. Comptroller describes an episode and his reaction to it which illustrates this pattern:

A situation came up a couple of weeks ago which involves the process of setting out our instructions to other parts of the organization about ways they should provide information needed to make next year's forecasts. The man who really initiates these forecasts passes the request through us because of our contacts and procedures. He had somehow gotten the idea that we hadn't gotten our letters out to the various divisions and therefore that we wouldn't be getting the information back in time to meet the schedule for presentation to the Board.

Now this man has ultimate responsibility for consolidating the forecast. He apparently felt that he had a responsibility through me—that I was responsible to him for this. But we are on the same level. In my opinion he had no business in this area, no business calling me to check on something like this, because once he turned this responsibility over to me it was entirely mine and I would take the responsibility.

Q: What did you do when that happened?

A: Well it burned me up. I'll be very frank with you. My immediate first reaction was to confirm, which I did do while I was on the phone with him, that what he was saying was not true, that everything had gone out. There's always a chance you might be wrong so I checked first. Then I told him. No, everything had gone out. My immediate reaction was to call him on the carpet first. He doesn't have any right to call me on something like this. Then I gave it a second thought and decided that that wouldn't help the situation.

Comptroller's immediate reaction to pressure from a peer was anger. He felt that his rights had been violated. He suppressed the impulse to counterattack, but one senses that he often might not, and the tone of his response to the peer made it clear that such pressures were uncalled for and unwelcome. Here the role pressures did not induce corresponding psychological forces on Comptroller, although they did instigate other forces of quite a different nature.

Two consequences follow this kind of response. First, the objective conflict failed to generate a psychological conflict for the focal person. The squeeze just did not get through to him, or at least it was very short-lived. Second, the role sender is discouraged from exerting further pressures of this kind. This resistance and rejection is in part successful as a coping technique. The potentially stressful pressures were

shunted aside so that he avoided the tensions which a more flexible person might have had to endure. Moreover, the likelihood of future pressures of this sort may have been reduced. But, as we shall see, these gains also involve some costs.

The tendency of rigid persons to reject their associates in times of stress is evident in Figs. 16-4 and 16-5. In low conflict situations rigids generally attribute a great deal of influence to their role senders, but under high conflict they attribute very little power to others; they report that others have very little influence over the way they behave on the job. Communication rates follow the same pattern; in low conflict roles, rigids communicate quite actively with their associates, but reduce their frequency of communicating when those associates induce strong conflicts.

Flexibles show a less marked trend in the same direction. But here the interview material suggests that the reduction in power and communication is in the nature of withdrawal more than overt rejection. The flexible person under stress sometimes pulls away from others, but the rigid tends to *push* others away when they press him too hard. In

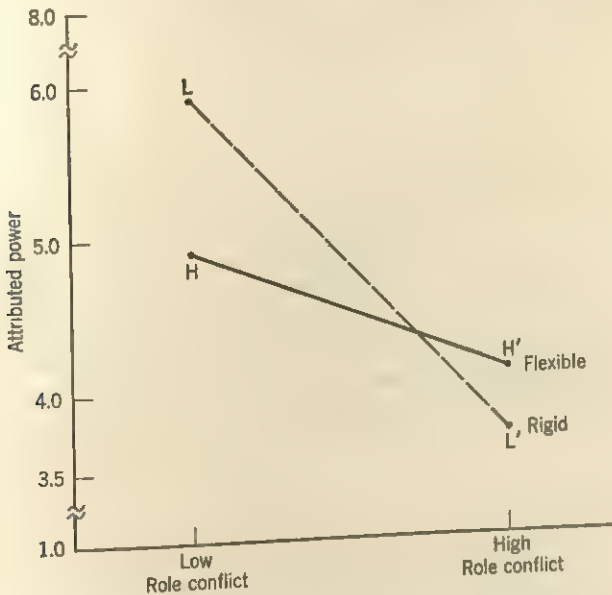


Figure 16-4. Mean power attributed to role senders in relation to role conflict and flexibility-rigidity (from the intensive study). N : $H = 8$; $H' = 11$; $L = 15$; $L' = 15$. Comparison $-H$ (4.9) vs. H' (4.1): $p < 0.05$; L (5.9) vs. L' (3.7): $p < 0.001$.

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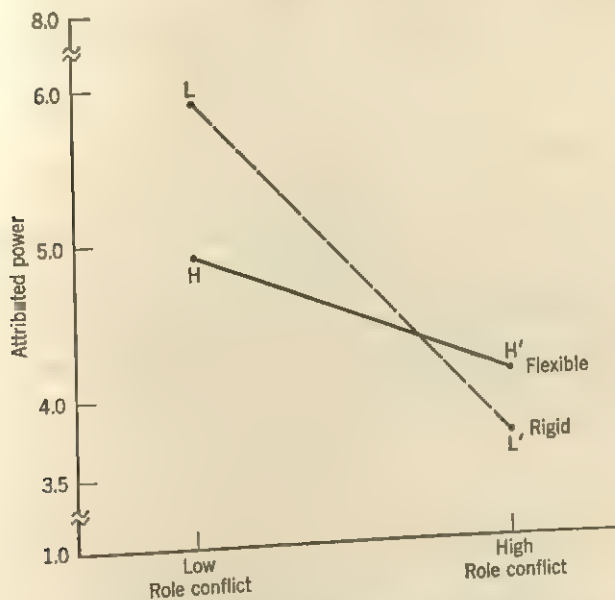


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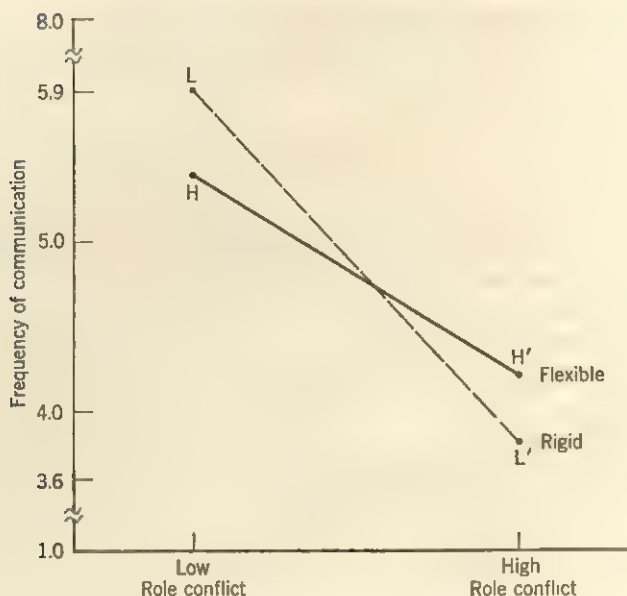


Figure 16-5. Mean frequency of communication with role senders in relation to role conflict and flexibility-rigidity (from the intensive study). N : $H = 8$; $H' = 11$; $L = 15$; $L' = 15$. *Comparison*— H (5.4) vs. H' (4.2): $p < 0.01$; L (5.9) vs. L' (3.8): $p < 0.001$.

general the coping pattern of the rigid is more deleterious to social relations than is that of the flexible person.

Other coping mechanisms which might be considered characteristic of rigid people are discussed in the following paragraphs.

1. Increased dependence on authority figures; as one resists influence from other associates, he comes to rely more heavily on his direct superior for guidance and support. Although he may reject requests from all others as illegitimate, dictates from his own boss and those on up the line he sees as inviolate. The strength for rejecting others often derives from the support he feels from his superiors, and any denial of their wishes might weaken that support.

2. Compulsive work habits; the rigid person often feels a total commitment to those responsibilities he does accept as his own, and he generally works doggedly to meet them. A rather extreme case of work addiction in a rigid person is presented in Chapter 18. Especially during periods of stress, rigids often find the comfort they seek in compulsively performing routine tasks or in throwing themselves completely into the work that stands before them, ignoring all else until

the job is done. As a side effect, of course, this often increases the person's value to the organization and his rejections of others may be overlooked.

3. Denial and projection; in times of rapid change, the person who is guided primarily by rigid conceptions of the environment can maintain those conceptions only by denying the reality of some aspects of the world around him. Similarly rigid standards of behavior, especially rigid moral standards, can be adhered to generally only with some substantial denial of internal impulses and temptations. Denial of cognitive inputs from others goes hand-in-hand with rejection of their influence. Analogously denial of immoral or unacceptable personal attributes goes hand-in-hand with rejection of some parts of the self. Thus the rigid person has a tendency to project the bad parts of the self onto others—to see them rather than himself as being weak or as having inappropriate motives. Projection, of course, supports his rejection of others. Not only does he see them as disrupting his otherwise orderly life, but he may see them as deserving rejection because of their "bad" characteristics.

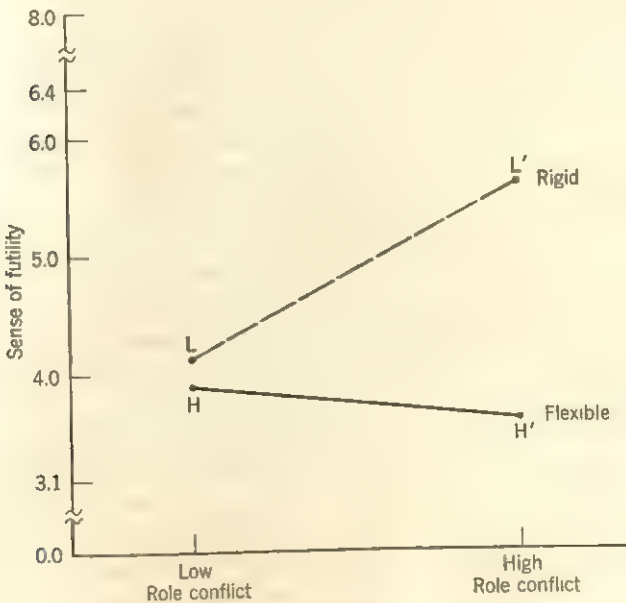


Figure 16-6. Mean sense of futility in relation to role conflict and flexibility-rigidity (from the intensive study). N : $H = 8$; $H' = 11$; $L = 14$; $L' = 14$. Comparison— H (3.9) vs. H' (3.6): n.s.; L (4.0) vs. L' (5.6): $p < 0.08$.

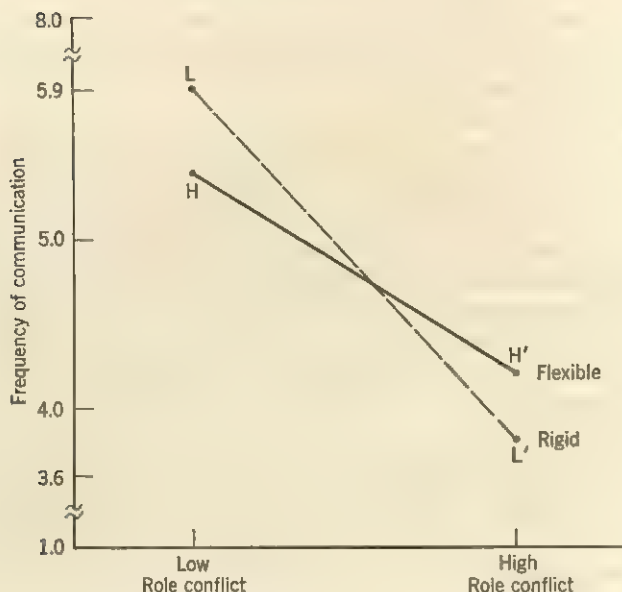


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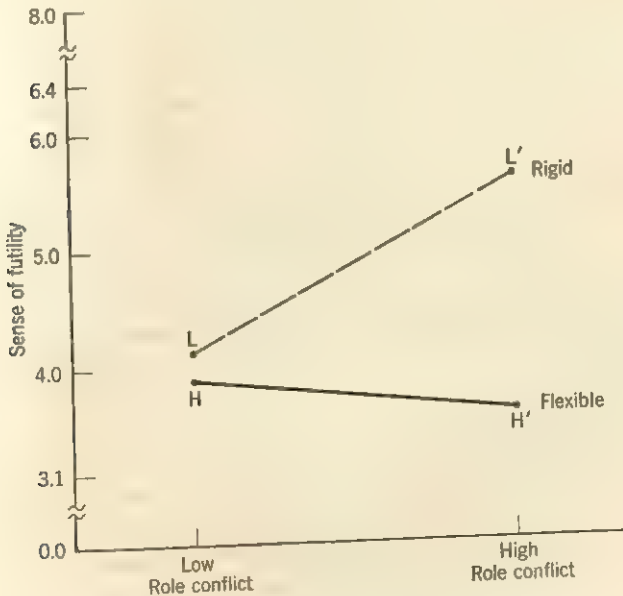


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The consequences of the rigid's patterns of coping with conflict and overload are somewhat hard to assess. They seem to be successful in avoiding or reducing tension, but at the same time they remove him farther from reality and from his fellow man and they probably lead him into more and more routine jobs. His ability to influence the organization, even those parts nearest him, is probably also reduced. By resort to these techniques, an already restricted but orderly life becomes even more restricted. Little wonder, then, that rigids experience a high degree of futility when in highly conflictful roles (Fig. 16-6).

Flexible Coping Styles

The coping patterns of flexible persons are more varied and somewhat more difficult to identify than are those of the rigids, but two general tendencies are apparent. The flexible person is one who attempts to adjust to environmental pressures by bending with the wind. He generally acquiesces to role pressures and promises compliance to requests others make of him. This behavior tends to elicit pressures from others and thus to generate conflict and overload. Nonetheless the flexible person continues to accept the pressures with what might be called verbal compliance.

When the pressures are mild and the work load light, he can generally deliver what he promises; this may not be possible under conditions of severe conflict or overload. But whether possible or not he often promises to comply with each request, and if his role senders increase the pressure he promises all the louder in an effort to allay the senders' concerns. This probably shouldn't be interpreted as deception. The promises are made with full intention to follow through, and louder promises signify stronger resolve. But flexibles tend to be optimists; they often fail to appreciate their own limitations. Therefore when one after another associate makes demands on their time and energies, they tend to say yes and hope somehow that they will find the time and the energy; they tend to "hang right in there," so to speak, and to keep on trying in spite of the difficulty and the tension.

Growing out of this cooperative compliant orientation is the second, and probably more constructive, coping pattern used by flexibles. They, more than the rigids, tend to seek help from peers and subordinates and to engage in joint problem solving with others. The success of this effort will depend, of course, on the skill and cooperativeness of his associates and the creativity of the problem-solving group. Collaborative effort toward making the most of changing conditions is the forte of the flexible. In times of stress this may provide the solu-

tion. Unfortunately, those to whom the flexible turns for aid are not necessarily the same persons who are imposing the conflict or overload; in fact they may be avoided at the time. This means, of course, that those who are most able to change the situation generally are not brought into it sufficiently. They may not be aware of the problems they create and thus do little to resolve them.

The fact that a flexible enlists the aid of others at all probably means that he has available a broader awareness of reality and insights into a larger range of potential solutions. And at times his benefactors will actually intervene in his behalf. Thus while the flexible person may bring more work and stress upon himself, he may also cope with it in fairly successful ways—at least in ways which keep him engaged in an expanding world.

Summary

Modern industrial organizations face the persistent dilemma of securing conformity to existing organizational procedures while simultaneously making allowances for adaptation to changing environmental conditions. In an earlier chapter we witnessed one attempted resolution of this dilemma through the institution of specific organizational roles, in which innovative behavior constituted a principal role requirement. Organizations may further insure this incorporation of both rigid and flexible behavior patterns through the enlistment of individuals whose personalities predispose them toward one or the other of these behavioral extremes.

A variety of traits differentiates the rigid from the flexible personality. The rigid pattern is conceived as one of inner-directedness, dogmatism, and authoritarian interpersonal relations. By contrast the flexible pattern is one of other-directedness, open-mindedness, and interpersonal relations emphasizing collegueship rather than authoritarian relations.

The principal mode of organizational involvement of the rigid individual is wholehearted dedication to the responsibilities assigned to him by official agents of his organization. Moreover, he prefers such responsibilities to be well-defined, mutually compatible, and relatively stable. The involvement of the flexible person centers instead around variability of experience, opportunity for introducing significant changes, and the cultivation of colleague relations.

The other-directedness of the flexible individual exposes him more than the rigid one to role conflict. Seeking recognition and apprecia-

tion from his role senders, the flexible individual frequently finds it difficult to say "no" to role senders and promises them more than he can realistically deliver. When a rigid person experiences conflict, it is more likely to be a function of his having accepted unquestioningly from his superiors an excessive amount of work and his reluctance to compromise his internalized performance standards by doing a "quick and dirty" job.

Not only is the flexible individual more frequently exposed to role conflict, but he is also more likely than a rigid one to respond to conflict by experiencing a high level of anxiety, worrying about what is in store for him and what he can do to make things right. By contrast one who is rigid is more likely to react to conflict by an abrupt rejection of the role senders creating the conflict. The flexible individual, incapable of effecting such a rejection comfortably, continues to comply in word to those role expectations which he can no longer fulfill in deed.

Achievement and Security

Orientations

IN THE PSYCHOLOGICAL STUDY of personality, few variables have received as extensive treatment as neurotic anxiety, introversion-extroversion, and flexibility-rigidity. Although these three dimensions constitute part of the standard armamentarium of the personality psychologist, they have nevertheless received scant attention in organizational research. The range of situations in which the concomitants of these variables have been studied is vast, but it has not generally been extended to include formal organizational behavior.

Research approaches to the role of personality in organizations have been confined to personality variables which are obviously and specifically organizationally relevant. Paramount among these variables are the motives which bind an individual to a particular organization and affect his productivity. These motivational variables have been treated in two distinct manners by various theories of organizational behavior.

Classical theories of administrative management, as represented in the writings of Taylor (1911) and Gulick and Urwick (1937), propose a theory of personality which is not simultaneously a theory of individual differences. Such theories, while acknowledging the importance of motivational considerations, generally assume that desired organizational behavior may be obtained by gearing organizational rewards to the demands of the typical organizational member. Member "demand" is under this approach treated as a constant rather than as a variable. Workers *in general* are assumed to want certain things, and these things are *in general* allotted accordingly. Summarizing this hedonistic view of administrative management theory, March and Simon comment that

First, in general there is a tendency to view the employee as an inert instrument performing the task assigned to him. Second, there is a tendency to view personnel as a given rather than as a variable in the system.

Although there are some exceptions in the literature, the grand theories of organizational structure have largely ignored factors associated with individual behavior and particularly its motivational bases (1958, p. 29).

In contrast to those theories in which motivational factors are entered as constants are the newer approaches of both March and Simon and Likert. Both these theories give considerable emphasis to individual motivational differences as these differences affect the processes of organizational production and participation. But while the importance of considering an individual member's peculiar combination of needs, traits, and perceptions is emphasized throughout these theories, little hint is given as to the particular dimensions of need, trait, or perception which are held to be most relevant to such a consideration. The search for the individual within the organization has tended thus to bypass the systematic description of organizationally relevant individual differences.

When one begins to study personality differences as they relate to organizational behavior, one is confronted by two poorly coordinated sets of resources. First, one possesses from personality psychology a number of reliably measurable personality dimensions shown in extensive research to be behaviorally relevant in a wide variety of environmental settings. Second, one possesses a variety of organizationally oriented approaches to personality which have eschewed these very dimensions in favor of considering constellations of individual motives for working.

There are two fundamental techniques for coordinating these available resources in the study of organizational behavior. The first of these involves the wholesale appropriation by organizational studies of those personality variables which have previously proved fruitful in personality studies carried on in other environmental situations. Chapters 14, 15, and 16 on neurotic anxiety, introversion-extroversion, and flexibility-rigidity, respectively, embodied such a technique. The present chapter will employ a complementary technique, taking as its starting point motivational variables suggested by an organizationally slanted approach to personality. Modes of analysis identical to those used in Chapters 14 through 16 will then be used to determine whether individuals who differ in their motivational orientations toward the job differ also in (a) the manner in which their co-workers perceive and react to them, (b) their attitudes toward their jobs, (c) their percep-

tions of and behavior toward their co-workers, and (d) their reactions to role conflict.

Consolidating a number of research findings which have revealed differences between the motivational assumptions made by the leaders of groups with varying productivity levels, Likert concludes that

The behavior of the high-producing managers, in drawing upon more motivational forces and using them so that they yield favorable attitudes, points to a fundamental deficiency in the traditional theories of management. These theories are based on an inadequate motivational assumption. They assume that people work only or primarily for economic reasons.

The high-producing managers and supervisors know from their experience that the motivational assumptions underlying both the traditional management theories and most of the practices of their own companies are inadequate. These managers, as we have seen, supervise in such a way as to harness important and powerful noneconomic as well as economic motives. . . .

This highly motivated, co-operative orientation toward the organization and its objectives is achieved by harnessing effectively all the major motivational forces which can exercise significant influence in an organizational setting and which, potentially, can be accompanied by co-operative and favorable attitudes. Reliance is not placed solely or fundamentally on the economic motive of buying a man's time and using control and authority as the organizing and co-ordinating principle of the organization. On the contrary, the following motives are all used fully and in such a way that they function in a cumulative and reinforcing manner and yield favorable attitudes:

[1] The ego motives. These are referred to . . . as the desire to achieve and maintain a sense of personal worth and importance. This desire manifests itself in many forms, depending upon the norms and values of the persons and groups involved. Thus, it is responsible for such motivational forces as the desire for growth and significant achievement in terms of one's own values and goals, i.e., self-fulfillment, as well as the desire for status, recognition, approval, acceptance, and power, and the desire to undertake significant and important tasks.

[2] The security motives.

[3] Curiosity, creativity and the desire for new experience.

[4] The economic motives (1962, pp. 59-60, 98).

From this brief catalogue of motivational orientations the intensive study selected and translated into operational terms three motivational variables, obtaining in this process two measures of ego motivation and one of security motivation. Among the vast array of ego motives which might profitably be studied in organizational settings, one seemed

especially demanding of consideration—*achievement* motivation. The concept of achievement motivation has implicitly or explicitly underlain many discussions on the effects of motivation on occupational role performance. Moreover, the concept is fundamental to some of the major dimensions of job satisfaction (Morse, 1953). The notion of need achievement has stimulated a sizable body of integrated experimental research conducted in nonorganizational settings.

According to McClelland *et al.*, the generic definition of the need for achievement involves the pursuit of an "achievement goal" which is in turn defined as "success in competition with a standard of excellence" (1958, p. 181). Such a standard of excellence may, according to McClelland, involve competition with others or self-imposed requirements of good performance. The intensive study differentiated these two forms of standards by means of its coding distinction between *status-achievement* and *expertise-achievement* variables. The basic materials for the coding were responses obtained in the second focal interview (Chapter 3). In this coding particular attention was paid to the respondent's answers to the following series of questions:

What do you think are the major factors that lead to satisfaction in a job?
What is most likely to be a source of dissatisfaction on a job?
What do you look for in a job? What makes a job a good one for you?
What are some of the things that would make a job bad for you?
What aspects of your job do you find *most* satisfying?
What do you find *least* satisfying in your job?

A respondent coded as being expertise-achievement oriented was one who indicated that he sought satisfaction in his job through doing well in job-related activities irrespective of any ancillary rewards. The individual who indicated that he was drawn to his job because it presented challenging tasks or provided an opportunity for the exercise of valued personal skills was also coded as being expertise-achievement oriented. On the other hand, a respondent was coded as being status-achievement oriented if he expressed a preoccupation with the possibilities for advancement offered by his career. Such a respondent might have indicated that he was drawn to his present job because of the opportunities for advancement it offered him, that he left another job because it was restricting such advancement, or that he would consider his career aspirations fulfilled when he obtained some specified higher-status occupational position.

To contrast with these two aspects of achievement orientation, a third motivational orientation was defined—*security* orientation. A respondent coded as security oriented was one who indicated that he hoped to maintain permanently the material comforts provided him

or his family either by his present position or by a higher position in his immediately foreseeable grasp. Any respondent who stated specifically that he sought security in a job or named the availability of a stable supply of material rewards as a source of his job satisfaction was coded as security oriented. A respondent who indicated that he sought an increase in job status was considered security rather than status-achievement oriented if these status increments appeared imminent and were not regarded by the respondent as ultimate ends but as means to obtaining some other specified security goal.

Although some of these achievements and security orientation classifications may appear to be mutually exclusive, any given respondent could be coded into all three categories. The data indicated that the status- and expertise-achievement dimensions were positively related ($r = .47$) and that both were negatively associated with the security orientation dimension ($r = -.38$ and $r = -.22$, respectively).

The distinction between normal and neurotic needs suggests that the neurotic anxiety variable may profitably be incorporated into analyses of job-related motivational orientations. According to Horney such needs as those for personal achievement characterize all individuals. As a defense against anxiety, however, a particular need may assume a "neurotic" cast, identified by a rigidity in the behavior oriented toward meeting the need. For example, the neurotic need for personal achievement is not simply a matter of fulfilling one's potential but is instead characterized by a rigid, insatiable quest for personal accomplishment, a "frantic and compulsive wish to be first in the race" (Horney, 1937, p. 216). The intensive study analyses of achievement and security motives therefore focused on individual differences along these motivational dimensions under two additional conditions—high and low neurotic anxiety. It was generally anticipated that the association between the motivational variables and other behavioral measures would be more pronounced among respondents high on neurotic anxiety, a group expected to act in accordance with these motives in a more exaggerated and intransigent fashion.

Expertise-Achievement Orientations

The fruitfulness of combining anxiety scores with the first of the intensive study's motivational variables, expertise-achievement orientation, is demonstrated in Table 17-1(a) and 17-1(b). Although being expertise oriented appears in the sample as a whole to be positively associated with high job involvement and high perceived long-range upward mobility prospects, these associations do not obtain with equal

Table 17-1 Variables Associated with Expertise-Achievement Orientation and Neurotic Anxiety (from the intensive study)

Orientation	Neurotic Anxiety		Total
	High	Low	
<i>(a) Mean Job Involvement</i>			
Expertise oriented	6.6 (7)	6.6 (12)	6.6
Not expertise oriented	4.6 (12)	5.0 (9)	4.8
<i>p</i> ¹	<0.02	n.s.	<0.01
<i>(b) Mean Perceived Long-Range Upward Mobility Prospects</i>			
Expertise oriented	4.8 (7)	5.3 (12)	5.1
Not expertise oriented	3.3 (12)	2.6 (9)	3.0
<i>p</i>	n.s.	<0.05	<0.02
<i>(c) Mean Job Satisfaction</i>			
Expertise oriented	4.8 (7)	4.3 (12)	4.5
Not expertise oriented	4.2 (12)	5.8 (9)	4.9
<i>p</i>	n.s.	<0.05	n.s.
<i>(d) Mean Pressure to Change Personal Style</i>			
Expertise oriented	5.3 (7)	3.8 (12)	4.4
Not expertise oriented	3.6 (12)	4.1 (9)	3.8
<i>p</i>	<0.06	n.s.	n.s.

¹ *p*-values of this and similar subsequent tables are based on *t*-tests between column means. The figure in parentheses beneath each mean is the number of cases on which the mean was computed.

magnitude for both of the anxiety groups. Table 17-1(a), for example, indicates that the association between expertise seeking and job involvement is more pronounced among those respondents who are high on neurotic anxiety.

Noteworthy is the fact that those who are least involved with their jobs are simultaneously high on anxiety and low on expertise orientation. This finding has an interesting parallel in some previous research on the behavioral correlates of need-achievement. According to Atkinson and Litwin (1960), task avoidance behavior is most likely where fear of failure is greater than desire for success, or, in the operational terms of need-achievement research, where an individual is both high on test anxiety and low on a need-achievement measure. In the present study an analogous condition would be high anxiety and low expertise-achievement oriented. With lack of job involvement considered as a manifestation of task avoidance in occupational roles, Table 17-1(a) offers a field study generalization of the laboratory finding of Atkinson and Litwin.

In addition to being associated with the magnitude of an individual's job involvement, the expertise-achievement motivational variable is also intricately related to an individual's temporal adjustment to the rewards offered by his job. Table 17-1(b) employs as its dependent variable the degree to which the respondent perceives upward career mobility as a likelihood for him, a variable coded from second focal interview materials. The table indicates that expertise-oriented respondents generally are more likely to perceive their chances for future advancement as good ones than are those not expertise oriented. The pursuit of expertise goals implies thriving on challenge and relishing successful performance, both consonant with general organizational goals of effective task accomplishment. For this reason, realistic expertise-oriented individuals have ample reason to expect that their motivational pursuits may offer them better-than-average chances for future career advancement, although such advancement may be to them a secondary goal. Table 17-1(b) further shows, however, that this expectation is somewhat blunted among those persons high on neurotic anxiety, the association between expertise and mobility prospects being less marked for this group than for the nonanxious group.*

* Table 17-1(b) has an instructive analogue in previous need-achievement laboratory research. Atkinson and Litwin report that those whose need for achievement exceeds their fear of failure are more likely to exhibit task proficiency than those whose fear of failure is greater than their need for achievement. This would suggest that prospects for career success should be greatest for those persons who are high on expertise-achievement and low on anxiety. Table 17-1(b) shows that this is indeed the case.

The anxious individual, as has been suggested in Chapter 13, is likely to have difficulty in disentangling the realities of his objective environment from the fantasies born of personal fears. Such an individual is less likely than those unburdened by neurotic anxiety to perceive that his pursuit of expertise goals will lead to future success in his occupational role.

The expertise-oriented individual who is relatively free from anxiety is therefore optimistic about his prospects for future accomplishments in his work role. On the other hand, satisfaction with the present work situation is, under the low anxiety condition, highest among those who are *not* expertise oriented [Table 17-1(c)]. Where neurotic fears do not color his affective reactions to his job environment, the worker who is not expertise oriented is more likely to find his contemporary job situation a gratifying one. Among individuals unencumbered by neurotic anxiety, expertise-achievement orientations determine in part whether a person will emphasize present or future rewards in his work. Although expertise-oriented individuals entertain prospects of *someday* obtaining their organizational promised land, many of those not so oriented place more emphasis upon the more tangible gratifications offered by their immediate work environment.

The several combinations of expertise and anxiety in Table 17-1 define four groups of individuals, each of which is characterized by being outstanding on one of a number of measures relevant to work role adjustment:

1. The individual who is not expertise oriented but is high on neurotic anxiety tends to have the least degree of emotional involvement with his present job; Table 17-1(a).

2. The nonanxious individual who is expertise oriented is the most confident concerning his prospects for upward career mobility; Table 17-1(b).

3. The individual who is neither anxious nor expertise oriented is the most content with his present work situation; Table 17-1(c).

4. The combination of expertise and anxiety characteristics which falls in most disfavor among one's co-workers is the fourth one—high expertise orientation coupled with high neurotic anxiety. Table 17-1(d) indicates that for a focal person who is high on neurotic anxiety, pressures from role senders for him to change his personal style of behavior * are greatest if he is also expertise oriented.

What sort of public image does the high expertise-high anxiety in-

* This measure combines with equal weights stylistic components I and II of the role conflict index (Appendix C). In Table 17-1(d) this total score has been reduced via a linear transformation to a one-digit code.

dividual create? Why do his co-workers perceive his personality style as discrepant from their desired standard? Data on the public image of—and, inferentially, the behavior of—this type of individual is presented in Table 17-2.

Table 17-2 Focal Person's Public Image Factor Scores as a Function of His Expertise-Achievement Orientation and Neurotic Anxiety (from the intensive study)

Orientation	Neurotic Anxiety		
	High	Low	Total
<i>(a) Mean Independence</i>			
Expertise oriented	44 (7)	42 (12)	43
Not expertise oriented	39 (12)	39 (9)	39
<i>p</i>	<0.05	n.s.	<0.05
<i>(b) Mean Emotional Stability</i>			
Expertise Oriented	86 (7)	93 (12)	91
Not expertise oriented	98 (12)	95 (9)	97
<i>p</i>	<0.01	n.s.	<0.05
<i>(c) Mean Assertive Self-Confidence</i>			
Expertise oriented	78 (7)	74 (12)	75
Not expertise oriented	70 (12)	71 (9)	70
<i>p</i>	<0.05	n.s.	n.s.
<i>(d) Mean Sociability</i>			
Expertise oriented	46 (7)	50 (12)	48
Not expertise oriented	54 (12)	51 (9)	52
<i>p</i>	<0.05	n.s.	n.s.

Table 17-2(a) indicates that persons who are expertise-achievement oriented are generally perceived as being more independent than others. This finding has an interesting parallel in the experimental literature on need-achievement, generalizing Samelson's (1957) report of a positive association between need-achievement and independent behavior when an individual finds himself in conflict with a majority position. It further appears that this expertise-independence association is greater among those individuals high on neurotic anxiety.

The pursuit of expertise goals is also positively associated with three additional public image factors; the high expertise-high anxiety persons are perceived by their role senders as follows:

1. Emotionally unstable [Table 17-2(b)]. The unstable end of this factor applies to a respondent who is

Excitable

Tense, edgy, jittery

Impulsive, often acting on the spur of the moment

Having ups and downs in mood

Quick to find fault with things, very critical

Resisting control, resenting being given orders

Not cheerful

2. Assertively self-confident [Table 17-2(c)], characterized by a respondent who is

Not shy

Aggressive

Not self-conscious, not easily embarrassed

Self-confident

In close touch with things going on around him

Socially bold, self-assertive

Ambitious

3. Unsociable [Table 17-2(d)]. The unsociable end of this factor characterizes a respondent who is

Not inclined to make friends easily

Not cheerful

Not sensitive to others, not sympathetic to others

Not carefree, not easygoing

Resisting control, resenting being given orders

Generally the expertise-oriented, anxiety-prone individual is viewed somewhat ambivalently by his co-workers. On one hand he gives the impression of independence and assertive self-confidence, both of

which traits are valued by organizational members. This public impression is consistent with our hypothesized picture of the expertise-oriented person as one with a strong task focus and an internalized set of self-evaluative standards. On the other hand, this combination of independence and assertiveness is not allayed by any evidence of the expertise-oriented focal person being emotionally close to those about him. He is perceived by his co-workers as being possessed of both emotional volatility and unsociable behavior trends. The high expertise-high anxiety person's approved * personal qualities do not redeem his disapproved * ones, and the result is increased pressures from his role set prescribing that he alter his personal style of behavior [Table 17-1(d)].

If one were to ask which group defined by the conjunction of the expertise and anxiety variables appears the least well adjusted to their work roles, the answer would be contingent upon what is considered the most important aspect of role adjustment. If the ability to satisfy one's role senders is chosen as the criterion, the expertise-oriented individual who is high in anxiety falls shortest in this regard. The high-anxiety individuals who are *not* expertise oriented, while conforming more to the norms of personal style expected by their role senders and constituting the group most likely to be perceived as sociable, fail to be emotionally involved with their work. Another group, the low-anxiety individuals who are not expertise oriented, appear to be the most satisfied group with respect to circumstances in their present job situations but are at the same time the least optimistic with regard to their future prospects. Each of these groups, therefore, presents its peculiar combination of strengths and weaknesses in adapting to its work role.

Status-Achievement and Security Orientations

Although status and security goals might appear to be mutually exclusive, an individual is not therefore precluded from being oriented simultaneously toward both goals. In the present data the correlation between the two variables was a relatively modest $-.38$, nine respondents indicating that they were simultaneously pursuing both status *and* security. Additional data suggest, moreover, that a typical individual's career span will generally embrace both types of orientations at speci-

* Approved and disapproved qualities were determined by the ideal description means of the traits included in these factors.

Table 17-3 Association between Age and Motivational Orientation (from the intensive study)

<i>Orientation</i>	<i>Status</i>	<i>Status and Security</i>	<i>Security</i>
Mean age ¹	39.0	41.5	47.5
<i>N</i>	(13)	(9)	(14)

¹ The *F*-test of over-all differences among means is significant at $p < 0.001$.

fied points in time. Table 17-3 presents the mean age of three groups with differing motivational orientations: (1) seeking status but not security; (2) seeking both security and status; (3) seeking security but not status. The table indicates that those oriented toward status are a significantly younger group than are those oriented toward security. Ninety-two per cent of those seeking status alone are under the age of 45, while only 21 per cent of those seeking security alone fall into this younger age classification. Those who report being both status and security oriented have a mean age which falls between the ages of the other two groups. Moreover, it is not simply because older respondents have achieved their status goals that they relinquish them in favor of security; in the intensive study data there is no association between an individual's age and his organizational status. As a person progresses through his occupational life cycle, his motivational orientation appears to undergo a systematic change, the status ambitions of more youthful individuals being supplanted in later years by the less adventurous orientation to security.

As with expertise orientations, individuals who differ in their status and security orientations also differ systematically in their attitudes toward their jobs and in their relations with their co-workers.

Individuals seeking security are viewed by their role senders as being significantly lower than others on the independence public image factor ($p < 0.01$). Consistent with this lack of self-reliance are the tendencies for these individuals to report significantly higher worry over not being liked by their co-workers ($p < 0.05$). This picture of dependent tendencies is rounded out by data indicating that, among respondents high on neurotic anxiety, security orientations are positively associated with attributing high power to role senders ($p < 0.05$). Status-oriented individuals are by contrast perceived by their role senders as being significantly higher than others on the independence public image factor ($p < 0.01$). Their involvement with

their jobs is greater than that of others ($p < 0.05$), as is the importance which they attribute to these jobs relative to other areas in their lives ($p < 0.05$). They exhibit greater confidence than do others in their upward mobility prospects ($p < 0.02$). This optimism is particularly highly associated with status orientations where an individual is low on neurotic anxiety (Table 17-4). Of the two groups not status oriented, only those individuals free of neurotic anxiety seem to think that their lack of emphasis on achievement-oriented behavior will detract from their attainment of achievement goals. Whereas those seeking security are dependent on co-workers and concerned with the attitudes of these co-workers toward them, individuals who express status needs are sufficiently optimistic about their mobility prospects that they steer an independent course and place a heavy emotional investment in the pursuit of their achievement goals.

But the paths along which individuals pursue status-achievement goals are not without their pitfalls. Table 17-5 indicates that, for the status-oriented person who is also high in anxiety, the social environment may become a source of pressures to alter his behavior, rather than a territory awaiting his conquest. The table shows that pressures from role senders are greatest for the status-oriented, high-anxiety focal person.

Case materials prove helpful in understanding the psychological chemistry by which the status-achievement orientations of focal respondents give rise to sent pressures from role senders. This transformation is particularly well illustrated in the case of Middle Management Man. This case embodies elements which may be found in the

Table 17-4 Mean Perceived Upward Mobility Prospects in Relation to Status Orientation and Neurotic Anxiety (from the intensive study)

Orientation	Neurotic Anxiety		Total
	High	Low	
Status oriented	5.0 (7)	5.4 (16)	5.3
Not status oriented	4.1 (11)	1.6 (7)	3.1
<i>p</i>	n.s.	0.01	0.02

Table 17-5 Mean Degree of Role Conflict in Relation to Status Orientation and Neurotic Anxiety (from the intensive study)

<i>Orientation</i>	<i>Neurotic Anxiety</i>		<i>Total</i>
	<i>High</i>	<i>Low</i>	
Status oriented	5.1 (7)	4.5 (16)	4.7
Not status oriented	3.5 (11)	4.3 (7)	3.8
<i>p</i>	0.05	n.s.	n.s.

cases of many other of our status-oriented respondents occupying jobs at a middle management level—a level shown in Chapter 8 to be unusually stressful and to contain an unusually high concentration of status-oriented respondents.

Middle Management Man was initially attracted to the corporation in which he now works because:

A large company like this is probably as close to Utopia for getting ahead on ability, you know, as you could approach.

Right now my future is unlimited. . . . My background since I left school has expanded considerably. My income has expanded considerably. . . . I'm basically young and new, you know, even in this corporation, so that I have a wide-open field.

But a wide-open field for what? What end is in sight?

I don't have a long-range goal, you know. I'm not saying that if I get to be in the next level, I'll be very happy and that's my career. If I were vice-president in charge of the company, I'd be very happy you know. I don't know where or what my objective is except to fulfill my potential. I don't know what that potential is.

Middle Management Man recognizes that his struggle upward is a function of his own desires, rather than a response to the demands of others:

My wife believes that part of the problem is not what this company expects, but, you know, what I expect. Either of myself or what I expect other people expect of me . . . right now I still put in more than

40 hours a week . . . I'm sure it's not really required here. Most people don't do it here. So she thinks it's self-imposed rather than company-imposed, and there may be something to it.

I think what I do I do because it is required. Maybe the only person who requires it is me. That's what she's basically saying. Maybe it's a balance of the two. I know I put more time in here than other people require of me or have ever asked me for.

His behavior is consistent with his *weltanschauung*:

If you don't go ahead, you stand still. You go up, or you go down.

There is, then, more than a hint of ambition apparent in the words of Middle Management Man. But how does his ambition evoke sent pressure from his role senders? A general complaint about this individual's driving himself and others is provided by one of them, who, when asked how he would like Middle Management Man to be different as a person, replies:

Mainly in his employee-relations. I think he needs a helluva lot of change there. He's a damn good gang-boss out on the line getting things done, but he's got a helluva lot to learn when it comes to personal relations and 90% of the men around here say the same thing. God! I get tired of hearing the complaints. In personal relations he gets a zero! This is bad for the section because he irritates *everybody*—people in other sections. And since they can't get at him, they take it out on us, the rest of the section.

This boy *needs* to learn to get along with people instead of running around, extra-aggressive, using people as stepping-stones. And he says he doesn't give a damn what people think of him and I think he should care. . . . He's good in every other respect—a damn hard business-man *but* he treats people in a section like they're on a gang at the plant where he came from.

Other middle management people pick up similar complaints from their role senders. Of one such person, a role sender says:

At times I feel he is over-ambitious to the point where he would not hesitate to hurt others.

And another of his peers says:

He should not be so brutal in his approach in dealing with all of us. He can be too tough. It comes from the way he came up. He had to

fight his way up. . . . He was reared in a section of the Ozarks where things were tough. . . . He is driven to his success by his wife. He has two children and he wants all he can get. If he and his wife want to accomplish anything they won't let anything get in their path. . . . I think he lacks a responsibility to the younger people in the department, to the kids' families. He has not enough regard for the private lives of the people under him. . . . He works hard and plays hard. There's no half-way with him.

These materials suggest that pressures are likely to be leveled against Middle Management Man's ambition especially as it affects his interpersonal behavior. In this light, his own attitudes toward interpersonal relations are interesting. At one point he says:

I always tended to feel that I just wanted to better whatever I was doing. And wherever I would see a chance I would take it.

This apparently guiltless opportunism also creeps into his answers to more specific questions. In his description of what he wants in a superior, or why he wanted a traveling job, he asks not what he can do for others but what they can do for him:

I want my superior to be a sounding board—a guide post.

I wanted to broaden, you know, broaden my whole background, broaden my own self by talking to these various people in various countries . . . I don't want a travelling job forever, but specifically for a given period of time I want a chance to get the polish that I think you need.

Other complaints against Middle Management Man are directed to the specific behaviors which his ambition engenders. For example, Middle Management Man is especially concerned with getting what he refers to as "polish." When asked what "polish" means, he replies:

My best answer is enthusiasm. You know, if I really find a challenge I like, I get enthusiastic. I mean, I can generate enthusiasm for myself and others. This is my greatest asset, and one of the liabilities I have for being enthusiastic is the pitfall that some people say you are impetuous.

And this is said of Middle Management Man. A co-worker says:

He should be less impulsive. He's apt to jump at a solution with perhaps not enough thought given to what may be involved. He should realize that maybe he has something to learn.

Another co-worker says:

I would like him to stop going off half-cocked. He should find out more about a situation before making a decision to do something about it. I'd like him to refer problems to proper people instead of trying to solve them himself. I'd like him to stop making positive statements about things he knows little about. I'd like him to stop being so impulsive.

His superior says:

He should approach things in a more seasoned way.

A subordinate says:

I think perhaps he should think things out himself a little more so he will know what he means when he says it.

Another subordinate says:

I think he could slow down just a little bit. I think he is inclined to go off in all directions.

When asked what he would find least satisfying in a job, Middle Management Man replies:

Least satisfying? I would say the routine. For example, routine correspondence. I mean the repetitive correspondence—over and over and over, and they ask the same questions.

But he is presently redesigning his job to eliminate this routine. Why?

I think on a *corporate* basis. I'm just freeing myself for more appropriate areas and to get a better return on the investment, you know, from me.

This extension of his job has its price—which is more apparent to those around him than to himself; one role sender says of him:

I think he could probably devote more time to the work in our department. I think he's going afield. Maybe he's concerning himself with things other than what our group should be concerned in. He's attempting to do work which normally would fall to the engineering group to do. They are capable of handling it. As a result, some of the attention

is not being given to his own work. Maybe he is taking on more responsibility than is required or expected of him.

Other complaints from his role senders are more specific, centering around assigned activities (trouble shooting, holding meetings, and the like) at which he spends little time. A repeated complaint is that he fails to keep his subordinates sufficiently informed. A crisis of this latter sort is described by a member of another section:

This involves his relationships with fellows in my section. Occasionally he consults people in my section concerning matters that are not our concern. He took a trip once and sent a lot of cables and letters to me and my section and *none at all* to his own people, who had to come to us to find out what he was doing and they were *very resentful* about this. He doesn't communicate with his own people when he should.

One of the "broadening" activities Middle Management Man has taken on is his voluntary joining of a general committee for coordinating activities in his part of the company. Of this his boss says:

I'm afraid this job is too much to handle along with his own job.

This tendency to ignore some contemporary aspect of a job in the process of concentrating on some other aspect which will better guarantee advancement is a common complaint from the role senders of status-achievement oriented individuals. The tendency takes two strikingly different forms. On the one hand are those people, like Middle Management Man, who are so preoccupied with orienting themselves to the "big picture" of company operations that they neglect the more mundane but necessary details of their contemporary positions. On the other hand, there is a second group of climbers whose aspirations are no weaker but whose perceived path to the top is the very attention to present minutiae of assignments which Middle Management so assiduously shuns. Role senders say of one such person:

I think he could be a little less conscientious. He takes his job just a little too seriously, is a stickler for details—which sometimes bogs down the over-all job.

He shouldn't get so involved in detail. I get the impression he may be an empire builder.

An intense orientation toward achievement may take either of two opposite forms—taking only the broad view versus being a stickler for

detail; both forms may evoke pressure from role senders. And both appear here in exaggerated aspect, more as defenses against fears of failure than as reality-oriented strategies for advancement. For where is the reality orientation in such self-defeating behavior as that exhibited by Middle Management Man who seeks "polish" in interpersonal relations so intensively and yet in these same relations appears to others as a "gang-boss"?

Motivational Orientations and Adjustment to Role Conflict

The preceding pages have presented sharply contrasting pictures of the security-oriented respondent as opposed to the expertise- or status-achievement-oriented respondent. The status-oriented respondents were similar in many respects to those pursuing expertise goals. Both manifested many behaviors commonly held to be characteristic of the occupationally ambitious individual. Both were shown to be highly involved with their jobs and to be optimistic about their future success in these jobs. According to their co-workers these individuals tend to steer a highly independent, individualistic course in pursuing this prospective success. All these characteristics correspond quite closely to those which might, on the basis of earlier experimental work, be attributed to the high need-achiever's performance in an occupational role.

A contrasting picture is presented by the security-oriented person. While status- and expertise-oriented individuals elicit from their role senders considerable pressures away from their behavioral status quo, fewer such pressures are elicited by focal persons who are security oriented. The security-seeking person is most conspicuous by the dependent relations he forms with his role senders. He worries more than others about being liked by these role senders, attributes high power to them, and is perceived by them as lacking in independence.

Further differences among these motivational groups become evident through an examination of the differential reactions of these groups to role conflict. Status-seeking respondents are particularly sensitive to the effects of role conflict. This may in part be a function of their heightened job involvement or the fact that they attribute to their job high importance relative to other areas of life. Their standards for self-evaluation thus become intricately bound up with the evaluative standards of their organization. When others indicate to the status-oriented person that his behavior does not meet the organizational norm and begin to pressure him away from his behavioral status quo, his position

becomes precarious. This does not necessarily mean that his self-esteem will thereby be lowered. Particularly striking in the case of Middle Management Man is his failure to acknowledge that pressures from his role senders are in part directed toward his personal style. He perceives that he faces difficulties but externalizes the source of difficulties. In the eyes of Middle Management Man and others of his type, circumstances creating this pressure become diffused until all areas of the job are fraught with potential and actual dangers. It is not surprising that the association between role pressures (as summarized in the role conflict index) and tension scores is greater for the status-seeking individual (Fig. 17-1). A primary mechanism for coping with such tension is an affective withdrawal from the source of the role pressure, that is, from role senders. Figure 17-2 for the status-oriented group shows an example of withdrawal of such interpersonal attachments; a comparable withdrawal is not observed among individuals who are less status oriented.

Status-oriented and expertise-oriented individuals differ principally in terms of the achievement goals peculiar to each. Expertise goals

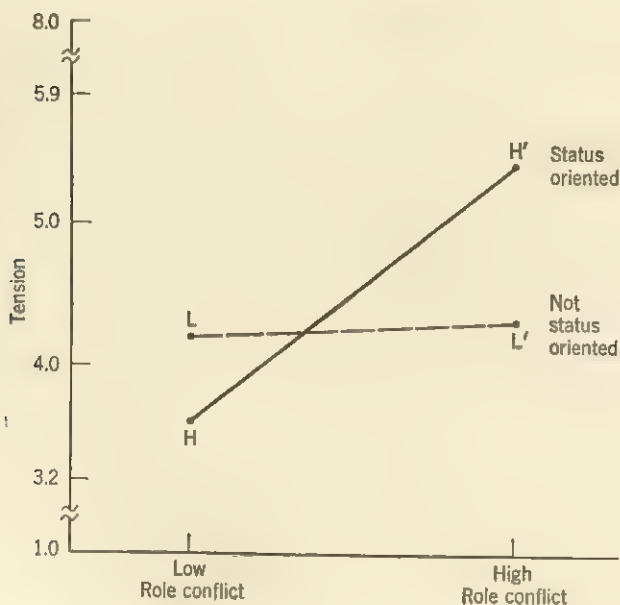


Figure 17-1. Mean tension in relation to role conflict and status-achievement orientations (from the intensive study). N : $H = 11$; $H' = 14$; $L = 13$; $L' = 7$. Comparison— H (3.6) vs. H' (5.4): $p < 0.05$; L (4.2) vs. L' (4.3): n.s.

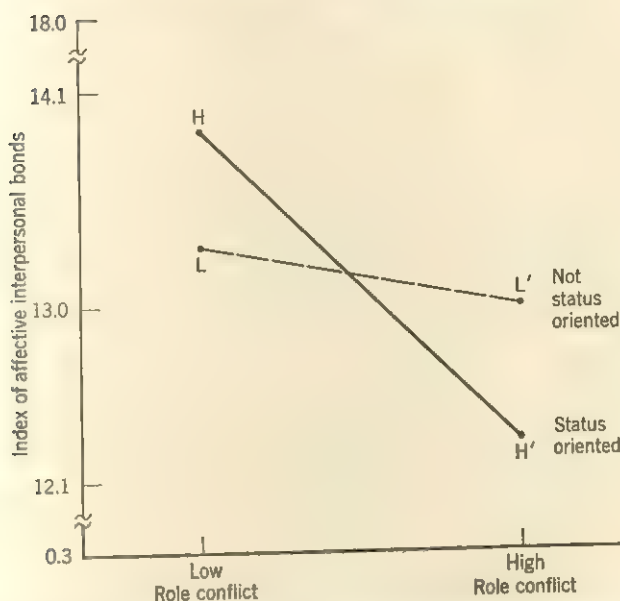


Figure 17-2. Mean index of affective interpersonal bonds scores in relation to role conflict and status-achievement orientations (from the intensive study). *N*: H = 10; H' = 14; L = 13; L' = 7. Comparison—H (13.9) vs. H' (12.3): $p < 0.001$; L (13.3) vs. L' (13.0): n.s.

are those involving the successful performance of challenging tasks or the exercise of valued skills. The self-esteem of the expertise-oriented person is therefore contingent upon these things, while that of status-oriented individual is more closely linked to the evaluations others make of him, particularly, and often exclusively, evaluations made by those who are in a strategic position from which to advance his career. Although the self-evaluative standards of the status oriented are in many respects socially relevant, the evaluative standards of the expertise seekers are decidedly asocial.

When a status-oriented individual under conflict reduces his ties with role senders, he is confronted with a further dilemma since the very senders he rejects today may be the very ones whose approval of him will be vital tomorrow. His awareness of this dilemma would only serve to heighten his experience of the diffuse job-related anxiety reflected in the tension index.

A comparable dilemma is not faced by the expertise-oriented individual, and his response to role conflict is somewhat more circumscribed. His inner-directedness permits him to sever his affective ties

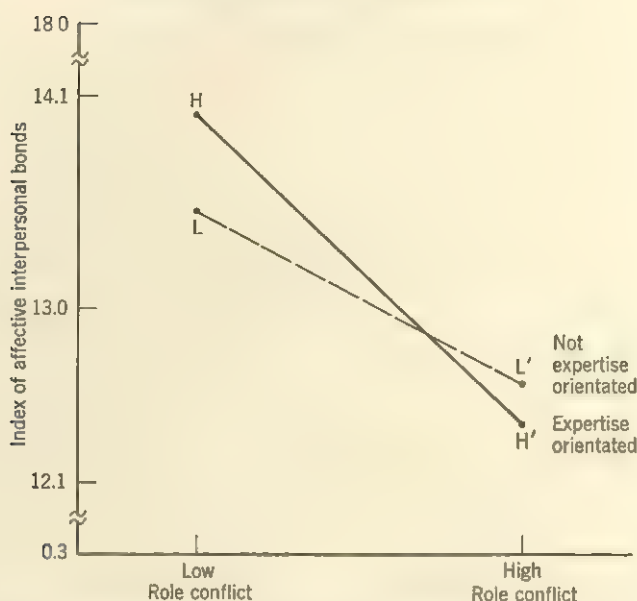


Figure 17-3. Mean index of affective interpersonal bonds scores in relation to role conflict and expertise-achievement orientations (from the intensive study). N : $H = 8$; $H' = 11$; $L = 13$; $L' = 11$. Comparison— H (14.0) vs. H' (12.4): $p < 0.01$; L (13.5) vs. L' (12.6): n.s.

with his role senders without being particularly disturbed about the future implications of this severance. In this respect his response to role conflict is somewhat similar to that of the rigid individual (Chapter 16). Figure 17-3 indicates a readiness of expertise-oriented individuals to weaken their affective bonds with role senders under conflict, but the effect of conflict on tension scores is about the same for the expertise-oriented group as it is for others.

In contrast to the reactions to role conflict of the achievement-oriented groups are the reactions of those who are security oriented. Security-oriented individuals appear less sensitive than others to the effects of role conflict. This relative lack of vulnerability applies both to the experiencing of tension (Fig. 17-4) and the weakening of affective interpersonal bonds (Fig. 17-5), both of which variables are associated with conflict in the sample as a whole. There are a number of possible reasons why the security-oriented individual may fail to respond to role conflict by becoming tense or becoming alienated from his role senders.

First, it should be remembered that security-oriented people in the

intensive study are a somewhat older group than others. In order for a person to achieve a high score on the tension index, he must be bothered by a wide variety of job-related circumstances. An older, more experienced individual may be better able in the face of conflict to realize that the effects of this conflict are likely to be circumscribed. He may have seen similar crises and may be aware that present difficulties in one area are not going to cause his organizational world to come to an end. Furthermore, the older individual may have achieved an equitable balance among various internal and external demands, the residual of which is a chronic but manageable state of role conflict. An excellent example of this latter phenomenon will be presented in Chapter 18 in the case of Medical Administrator, an individual under high conflict who experiences little resultant tension. Although he is under constant pressures from role senders in some regards, he has accepted these pressures as manageable and relatively undisturbing alternatives to the far more severe conflicts latent in his role.

Negative sanctions are often implicit in role pressures, and these sanctions can range in magnitude from mild disapproval to threats

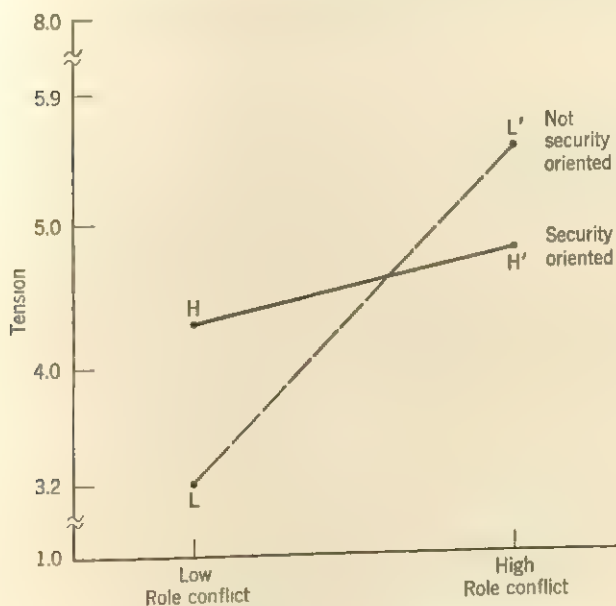


Figure 17-4. Mean tension in relation to role conflict and security orientations (from the intensive study). N : $H = 13$; $H' = 12$; $L = 9$; $L' = 10$. Comparison— H (4.3) vs. H' (4.8): n.s.; L (3.2) vs. L' (5.3): $p < 0.05$.

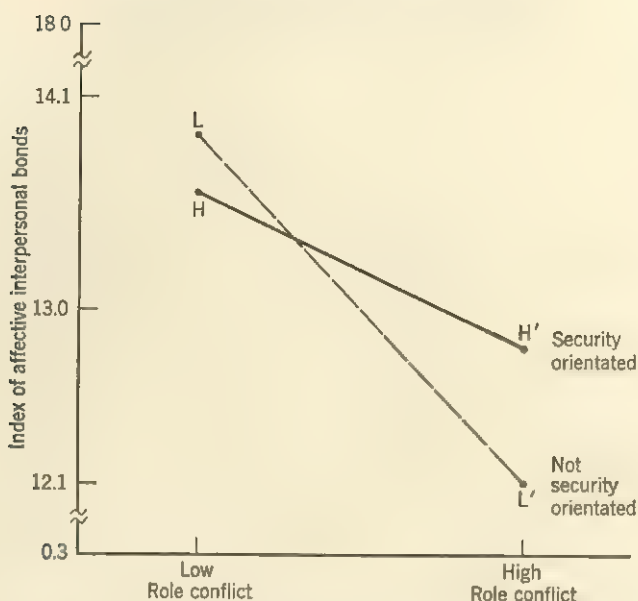


Figure 17-5. Mean index of affective interpersonal bonds scores in relation to role conflict and security orientations (from the intensive study). *N*: H = 13; H' = 12; L = 8; L' = 10. Comparison—H (13.6) vs. H' (12.8): n.s.; L (13.9) vs. L' (12.1): $p < 0.05$.

of dismissal. Organizational members are likely to differ in the degree of implied negative sanctions required for them to alter their behavior. The status-oriented individual is highly ego involved with his job and has rather diffuse, adverse reactions to role pressure. He may regard even mild criticism as a potential threat to his self-esteem since such criticism casts a shadow over his promotion prospects. The security-oriented respondent, however, is oriented toward more tangible commodities—possession of a steady job, maintenance of a stable income, and so on. Being passed over for promotion is not for him the ego-relevant threat it is for achievement-oriented individuals; he is prepared to sit tight, shunting off pressures toward change unless noncompliance with such pressures implies dismissal from the organization or other severe negative sanctions.

These circumstances may serve to blunt the severity of the security-oriented individual's reaction to role conflict. Moreover, his relatively strong dependency needs may prevent him from reducing his affective investment in his role senders very greatly, even under conditions of role conflict.

Summary

Whereas the preceding chapters have dealt with broad characterological traits, the emphasis here is specifically upon the individual's motivational orientation toward his work. Three aspects of this orientation were studied: the desire for expert accomplishment, the desire for status, and the desire for security.

Status-oriented individuals were alike in many respects to those pursuing expertise goals; both types of individuals manifest behavior commonly held to be characteristic of the achievement-oriented person. Both are shown to be highly involved in their work, oriented toward prospective advancement in the organization, and perceived as relatively independent by their associates. The security-oriented individual, by contrast, is seen as more dependent, worrying more about being liked by others and attributing high power to them.

Despite the status-achievement values of most organizations, the organizational environment is a more hostile one for the status oriented than for the security oriented. Strong pressures are likely to be exerted, particularly upon those whose status striving has a compulsive character. Status-oriented individuals react markedly to the effects of role conflict, responding to ego-threatening pressures from role senders by a marked increase in tension and a decrement in their affective attachments to their role senders. The security-oriented individual, on the other hand, has somewhat blunted affective reactions to role conflict, his dependency upon role senders being such that even when these senders create difficulties for him he is unable or unwilling to reduce his attachments to them.

PART SIX

Conclusions

The detailed consideration of personality variables concludes the step-by-step analysis of the various factors which bear upon episodes of role conflict and ambiguity in organizations. Throughout the preceding pages an attempt has been made to buttress or amplify the statistical findings by excerpts from case materials. Having attempted to join the methods of case study and analytical surveys in these studies, it seems fitting to conclude by presenting two kinds of summaries. In the first, Chapter 18, six complete cases will be analyzed, demonstrating the fusion of various previously discussed variables within the experience of a single individual in a specific job. In the second, Chapter 19, we will review the major findings of the foregoing chapters and attempt to synthesize our conclusions.

As always, research raises as many questions as it suggests answers. Among these are certain questions of practical importance. Is it possible to reduce the incidence of role conflict and ambiguity in indus-

trial organizations? Or, alternatively, can significantly better ways be found to manage such problems as do occur? We believe that within limits, answers to both these questions are possible. The final chapter therefore concludes with a discussion of the practical course of action that would seem to be indicated by our findings.

18

Conflict and Attempted Solution

THE STRESSES of role conflict are not equally damaging to all who experience them. The extent to which role conflict produces symptoms of strain is mediated by the personality of the individual in conflict and by the nature of his relations with his co-workers. The relationship of role conflict to individual strain, and the interaction of personality factors and interpersonal orientations in that relationship, can be understood in terms of the attempts of the focal person to cope with the stress of conflict or ambiguity. To the extent that his coping techniques are successful, he reduces the initial stress or alleviates the resultant strain. To the extent that his coping is unsuccessful, the conflict may increase or the strain become intensified.

This chapter analyzes the ways in which different coping styles are employed to handle job-related conflicts. For this purpose we rely heavily on the verbatim responses of six focal persons and the set of other persons to whom each is related on the job. We treat these six role sets by means of qualitative, case-study analysis rather than the more nomothetic approach previously used for the intensive study and the national sample. Table 18-1 summarizes the six positions to be analyzed, the core problem in each case, and the coping style manifested by the focal persons in attempting solutions.

These six cases are not typical of the national or intensive samples. Rather, each case is extreme on some dimension discussed earlier, for example, an organizational variable shown to be stressful, the amount of resulting strain, or a personality variable relevant to understanding reactions to role conflict. Two cases represent intriguing combina-

tions of such factors: Medical Administrator works under conditions of high role conflict, yet scores low on tension; Assembly Superintendent is high on tension but is exposed to little objective role conflict.

These cases are not only extreme, but in each the conflict appears to be of long duration, chronic rather than acute. We do not deal here with spontaneous conflicts that are solved in a single day, so that the focal person goes home from a clean desk with a wholesome spirit. We are concerned instead with a person's long-term struggles with himself and his job environment, and we view these at a moment in which the conflicting forces seem to have reached an equilibrium of some stability.

In examining these six cases, we do not seek to present a grab-bag of coping mechanisms from which one can pick and choose the appropriate device the next time he is under stress. The emphasis is on long-term coping styles, ego-syntonic behavior orientations calling forth specific solutions to concrete problems. The introduction of such a notion as style does not mean, however, that we are casting our lot wholly with those who maintain that an individual unvaryingly applies the same coping mechanisms to varying stresses rather than freely employing the solution which best fits the specific problem. We believe that individuals, by dint of certain personal characteristics, are restricted in their choice of situationally appropriate coping tactics—much in the way that character (in the psychoanalytic sense) is thought to limit the choice of situationally appropriate defenses. Were a focal person to ask "How do I solve this problem?," we would not only have to ask "What is the problem?" but also "Who are you?"—lest we proffer an ego-alien solution.

The concept *ego-alien solution* suggests that the analysis of coping must be concerned not only with a problem and its solution, but must consider also the costs of the solution. Such costs will be reckoned mainly with reference to three systems: the personality of the individual, the network of his interpersonal relations on the job, and the organization in which he works.

Central to the consideration of coping behavior is the distinction made earlier (Chapter 13) between core and derivative problems. The task of coping is not complete when a person has dealt with an objective conflict and his own affective reaction to this conflict, since such coping may itself upset a previous equilibrium of forces and engender a new set of conflicts. Only after a person has brought all such forces back into equilibrium can the success of his coping be judged. A core problem will thus be regarded as that problem to which an individual's defensive maneuvers are primarily oriented. A derivative

problem will be identified as that problem which is created *as a result of an individual's primary coping behavior*. A given core problem may create any number of derivative problems, depending on the specific behaviors used to cope with it and on the peculiar characteristics of the personal and environmental equilibria which are upset in this coping process.

The cases treated here represent three types of core problems. In the first pair of cases the core problem is primarily an intrapsychic difficulty which is acted out in the work environment. In the second pair of cases the core problem is a mismatch between the requirements of a role and the capabilities of the occupant of that role. In the third pair of cases the core problem exists principally in the objective environment. This tripartite classification is relative, since few difficul-

Table 18-1 Six Cases of Role Conflict and the Attempts to Cope with Them

<i>Positions</i>	<i>Core Problems</i>	<i>Coping Attempts</i>
	<i>Intrapsychic</i>	
1. Assembly Superintendent	Guilt; excessive rigidity	Work addiction
2. Executive	Autonomy conflict	Acting out; projection; contrived interpersonal conflict
	<i>Role-person mismatch</i>	
3. Mathematician	Inadequacy of administrative skills	Deprecation of non-profession skills; cynicism; hostility
4. Sales Analyst	Technical inadequacy	Dependent behavior; suppression of hostility; idealization of others
	<i>Environmental</i>	
5. Medical Administrator	Boundary conflict between professional and nonprofessional activities	Compartmentalization; overevaluation of nonprofessional skills; dependent behavior
6. Credit Expediter	Boundary conflict between sales and credit activities	Internalization of conflict; outgroup identification

ties fall completely into a single category. Just as objective conditions feed into the fantasies of one person (Executive) who acts out his personal conflicts on the job, so do the ambition and idiosyncratic identification of a second person (Credit Expediter) aggravate the objective stresses of a touchy position at a departmental boundary.

Similar core problems will be seen to evoke dissimilar derivative problems by virtue of the different coping mechanisms employed (the case of Mathematician versus that of Sales Analyst). Dissimilar core problems will, as a result of the attempted solutions to them, be seen to generate similar derivative problems (the supervisory difficulties of Sales Analyst and Medical Administrator).

The study of coping with stress is therefore not confined to the discovery of rational solutions to transient problems. Ultimately coping must be analyzed within a framework which includes the characteristics of the core problem, the personality of the problem solver, the derivative problems evoked, and the costs of the solution to the intrapsychic, interpersonal, and organizational systems. Moreover, the study of coping cannot be confined to effective coping behavior. Coping attempts are not necessarily successful. The concept of coping is defined by the behaviors subsumed under it, not by the success of such behaviors.

Core Problem Is Primarily Intrapsychic

Case 1: Assembly Superintendent

As superintendent of the terminal section of a line for assembling engines for tractors and other types of farm machinery, this man has considerable responsibility for the final product but is markedly dependent on the work of numerous subassembly lines which feed their completed units into his area for final assembly. According to Assembly Superintendent, the problems generated by this position reach nightmarish proportions, and his intense affective response to these difficulties is not unreasonable. His scores on the indexes of ambiguity and tension are second highest of all persons included in the intensive study.

To summarize the incessant crises described by Assembly Superintendent is to rob them of their baroque horror—like a 100-word abstract of a Kafka novel. Assembly Superintendent speaks at great length and with little urging about the difficulties he faces on his job. When asked whether he receives requests from the other departments, he gives a few routine facts and volunteers, "This is about as rough

a job as I've ever been connected with. . . ." Throughout the early section of the interview, Assembly Superintendent interrupts the sequence of questions and answers to tell about the difficulties he had that very morning. It was difficult for the interviewer to complete a list of Superintendent's required activities, because the mention of each activity was accompanied by a gory description of some contingent problem.

Q: What other things do you spend your time on?

A: Today we were in trouble before we started . . .

One might first guess that all was not well in Superintendent's world from the fact that he has to work nonstop for long hours under pressure.

I get paid for work from 7:30 until 4 with a half hour for lunch. Now when I got in today it was five after seven; yesterday it was five minutes of seven. I try to make it at least 7. . . . And while we're working I don't sit down and relax any time.

We never finish, but I'm not kicking about it. If I had twelve hours a day in here, I might break even with what I would like to do. Last week when I spent two hours with you, I put in at least an hour and a half time make-up for what I lost during the day to try to catch up. . . . I don't know, maybe I live my job. I don't mind it; I like what I'm doing.

Q: How about feeling you have too heavy a work load, one you can't finish in a day?

A: It bothers me. . . . I wish I could do more.

In this plant a production man's job is really tough and you're under pressure from whistle to whistle.

I've lost my noon hours a lot of times by not even realizing it was noon.

Last year I took the job over and I only had two assistants, and I got to the point where I lost about twenty pounds of weight, and I'd just run up and down the line all day.

I've got writer's cramp from the grievances I handled yesterday. On the assembly line where you're working by the minute, by the second, it's normal, really.

Why does Assembly Superintendent feel that this intense activity is necessary? In addition to the problems of keeping abreast of production schedules and union problems, he attributes considerable difficulty to the fact that his job is a "terminal" one and therefore has more than its share of crises:

I'm the last deal in the assembly line, so all the problems that originate in machining and other areas are building up until they hit my line.

Superintendent maintains that because his plant is still quite new, all the operational bugs are not yet worked out; he also regards the caliber of workers as lower at this subsidiary than at the parent company. Furthermore, he feels that he cannot get adequate recognition from management for the problems he faces:

They don't want to acknowledge any what we call non-standard conditions, which we have all the time.

Nor does he have authority adequate for the solution of these problems:

On some things I don't think I have as much authority as I should have.

But far more important are the ambiguities of his job:

Q: How clear are you about what people expect of you?

A: Sometimes I'm really in doubt.

Part of the blame for these ambiguities he attributes to management for being too capricious in their change of plans.

They were talking last year about getting this new model rolling by Labor Day, and just easing it into the public this year, so next year we'd be sailing down the road. But instead our forecasts were so dead wrong on the dang thing that everybody got caught short. On the engine deal on my line, they had the same thing. They set October for that engine to be all right, and they were slowly going in, and all of a sudden we had to be in full production. Maybe in two hours there would be five or six changes. You almost can't live with a thing like that.

He is apprehensive about having to pass on these sudden changes to his men:

Occasionally a guy comes up, maybe I'm going to tell him we're going to do something, and the order was passed to me that this is the way we're going to do it, and we don't want it broadcast. Well, you get a funny look in their eyes when you tell them that, and maybe I look kind of odd at the man who gives me the order too . . . most of your troubles with personnel or with supervision or with anybody is just the fact that things weren't explained in the first place.

Additional ambiguity lies in delayed feedback about the quality of his work:

We get field reports . . . and every once in a while there is something very glaring in there where you can see where we should have gotten that before it got out, but we didn't.

Coupled with this is a feeling of conflict regarding quality and quantity:

There is no doubt about it—No matter how many errors we catch here, and a lot of them go out, you can't rely on somebody else picking them up. It's going to get through, and no matter how good our engines are built we can build them better. I'm not going to say it's unavoidable, but it's really a problem to make it better because we've worked with such a time limit on the thing.

In short, Assembly Superintendent sees his work environment as filled with capriciously shifting demands which are never and can never be fully met. Each day's log of problems is carried over into the next, and the flow of minor crises and sudden changes never ceases—like the production line itself. How does Superintendent think he must keep his head above water? Work, work, work.

We might easily interpret the data presented so far as describing a person adversely affected by a genuinely stressful environment. But the above materials are based on interview and questionnaire responses only from Superintendent himself. When we look at the interview data provided by his role senders, the situation is put in a very different perspective. In spite of his high scores on the indexes of tension and ambiguity, Superintendent scores low on the index of objective role conflict. In the interviews of role senders we find relatively few complaints about his performance. The number of complaints about Superintendent, however, is less important than their nature. By and large these complaints are all variations on a common theme, the nature of which is apparent from the words of the senders themselves:

I'd rather see him delegate more responsibility to his subordinates; he has a do-it-myself habit.

I would rather see him delegate some of the extra duties that he has taken upon himself to do, thereby relieving him of the constant pressure of being solely responsible for everything that happens in the department . . .

He should put more responsibility on his subordinates.

He does some work which his subordinates could do. He said, "I'll do it my way and I know it's done. By the *time* I explain it to him—and it might get lost—I'll do it."

I'd like for him not to try to do everything all by himself. For instance, we'd be sitting in the office. Mr. Manager would say, "I want you and John and Basil, and Otto in the office." Instead of telling me or someone else to tell John or Basil, he (Superintendent) goes out and tells them himself.

Spend more time in the office. He has enough assistants; let others come to him.

Quit working overtime; one hour a day would be enough.

Go home at quitting time. He spends at least three hours overtime. He really wouldn't have to do that.

With these considerations we no longer see Superintendent as the innocent victim of circumstance. He has expanded his sphere of activities to the point where pressures are intense, but the crucial thing is that *he* has effected this expansion; it has not been imposed by others. Why has he executed this expansion? There are several possible answers to this question.

1. He may be driven by ambition and a desire to get ahead on the job. Superintendent's role senders, however, do not perceive him as inordinately ambitious, and he is not among the status seekers according to our index of such aspirations. He has not always been in the heavy machinery industry, nor does he ever speak of career goals in this business. He indicates that he seeks to obtain from his job primarily the rewards of security and affiliation, and he has relatively little reason to complain about his present success in obtaining either. Nor does he recount any episodes in which he may have been disadvantaged in the area of promotion. There seems to be little positive evidence that he is unduly driven by an ambition of the garden variety.

2. He may get a great deal of intrinsic satisfaction out of his work—a sort of artisan's approach to machine assembly. However, Superintendent never expresses much satisfaction about the actual content of his job, nor has he any pretensions about the altruistic character of his work. His work satisfactions come from a job well done. One might also add: *any* job well done. Nothing in this interview suggests any feeling by Superintendent that his job is *uniquely* satisfying. He feels as though he's pretty well suited for the job, but could as well do something else. It is not involvement with the content of his job that leads him to the overextension of activity described above.

3. As a person with a very high need for cognition—the highest in

the intensive study—he may spend a lot of time attempting to clarify an ambiguous environment. This may be one important source of Superintendent's difficulties. Most of his descriptions of the pressures and ambiguities of his job are probably exaggerated. If one can discount the melodrama of his descriptions, Superintendent's objective problems appear no more serious than the problems faced by many focal persons who are far less distressed. Superintendent's descriptions of the irritants in his environment do, however, have a unifying *leit-motif*. In his view, they are attributable to unpredictable characteristics of the environment: confused and conflicting orders from others; lack of authority to make his own decisions; sudden changes of production schedules; delayed feedback about errors; unpredictable delays and errors in receiving necessary materials or information from other departments. It is partly to restore predictability to an environment perceived as capricious that Superintendent dedicates such intense activity.

It is accurate but insufficient to characterize Superintendent as a person with a very high need for cognition, struggling in an environment of extraordinary uncertainties. We have still to know why Superintendent has taken this particularly hyperactive solution to his difficulties. Why does he not delegate more work to subordinates? They could master the objective environment as well as he. Alternatively, why has he neither requested transfer to another department nor attempted to get another job? The first alternative is suggestive of the second complaint that role senders make about Superintendent—his failure to be strict enough with subordinates. His reluctance to be a disciplinarian probably stems in part from his desire to satisfy affiliative needs on the job. (Affiliative needs constitute one of his major expressed reasons for working.) Superintendent desires to be a hail-fellow-well-met and in part succeeds; his senders see him as making friends easily and being cheerful. He is instrumental in organizing off-the-job social activities for his co-workers. He says he gave up working overtime on Saturdays and Sundays because he found himself talking too much with the other fellows on these days. Part of his reluctance to supervise strictly (which would be of benefit to him in other ways) is probably attributable to a feeling that it might result in a withdrawal of his subordinates' affections toward him.

Superintendent's cognitive and affiliative needs, often operating at cross purposes, provide some insight into why his routine difficulties have been magnified to unusual proportions. These needs do not, however, seem sufficiently potent to account completely for: the extremes of overwork in which he indulges; his former feeling that he was "going to have a nervous breakdown"; his loss of 20 pounds (allegedly

through overwork) during his early months on this job; and a vocal paralysis of several months' duration, apparently ending shortly before he was interviewed.

Superintendent's overindulgence in work activity and his development of paralysis (which would in part remove him from the supervisory role) suggest a deep ambivalence toward his job. Implicit in these extremes of behavior is an obsessive-compulsive personality. And the answers to many questionnaire items (Superintendent admitted to a purposeless compulsion to count objects) tend to bear out this interpretation. He scores in the top decile on rigidity. Rather than any intrinsic positive satisfaction in job content, Superintendent's intense involvement with work seems to represent a means of guilt expiation. He doesn't *want* to keep busy; he *must* keep busy. Note especially how he "relaxes" after work:

When I go home from here—this has worked for me for years—I'm so dead tired I don't know if I can take another step. So I either go out in the garage or down in the basement—I have a workshop in the basement—and I start fooling around down there, maybe making some dang thing, some project that I've got, or taking all the stuff off of that shelf and putting it on this one, and take this one and put it on the other one, rearrange it, and in an hour or two I come up and I'm all relaxed.

For Superintendent relaxation means *doing* something rather than resting, even doing some otherwise senseless rearrangement of articles on shelves.

We would expect Superintendent to work excessively hard on any job, and to require unusual assurance that he has done the job well and completely. In this respect his problems are aggravated by his present job; since the feedback he gets about errors is generally delayed, he can never really call anything finished, and his guilt is never fully expiated. He seldom gets any positive feedback; he knows only when his group has fallen below an adequate level of performance. Since success is never fully conferred by the outside world, there is always a reason for Superintendent to do more. He would be happier in a job where there was more sense of closure after each task, but he would be less happy in a job where there was any delay between assignments. In a job with slack periods he would repetitively clean out his desk rather than bear the agony of momentary idleness.

There is an element of subtle irony in Superintendent's work addiction. By doing more than is necessary he makes trouble for himself; the crises he creates, however, are those that he is also able to solve.

Here on an elaborate scale can be seen a typical defense mechanism of the obsessive-compulsive: undoing.

An additional factor contributing to Superintendent's syndrome of overwork is his failure to be a strong supervisor. Stern supervision would be incompatible with his affiliative needs, but his failure to utilize his subordinates is overdetermined in ways which are related to his obsessive-compulsive behavior. To ask someone else to solve the problems which he creates would be only indirectly expiating. The important thing from Superintendent's standpoint is not merely that the job gets done but that *he* do the job. To delegate to someone else the task of solving the minor crises that Superintendent makes for himself would render the undoing pointless.

From a not-too malevolent environment Superintendent has fabricated, partly in reality and partly in fantasy, a work situation in which he experiences a constant pressure. And such pressure is a barely tolerable substitute for still more taxing internal conflicts. He has accepted the lesser of two evils, but the acceptance is flawed. While he professes involvement with his work and seems superficially to throw himself into it with enthusiasm, his unconscious desire to rid himself of the situation periodically raises its head. He developed a vocal paralysis which removed him from the job situation without the removal "being his fault." He quit working weekends because he found himself "talking too much" with others who also worked weekends. That the two behaviors which removed him from the job both concerned the vocal apparatus (but in opposite ways) may be viewed not as an irrelevant coincidence, but as psychically identical means of withdrawing from a situation which is at once a blessing and a horror. Tapering down in work would be impossible for Superintendent. That his attitudes veer from complete involvement to total withdrawal indicates his underlying ambivalence toward his present work situation.

Case 2: Executive

Executive, like Superintendent, attempts to deal with intrapsychic difficulties by converting them into objective job-related problems. Both men score high on proneness to neurotic anxiety, but where Superintendent's defenses are directed primarily at coping with guilt, Executive's core problems center around autonomy conflicts. Although autonomy in its broader sense implies freedom from control by any agent, Executive is concerned with obtaining freedom from control by those above him, especially his immediate superiors. Moreover, the pattern of externalized autonomy conflicts between Executive and his

superiors is duplicated in Executive's relations with his own subordinates.

Executive reports problems with two superiors: a previous boss and his present one. His conflicts with his erstwhile boss were the more explosive of the two:

He was the head of the department, and I was his assistant. And he really burned me up. He just completely frustrated me. There just wasn't anything I could do to make him see the light, and he was the type of fellow who was just opposite from me—he screams at the workers and doesn't scream at the boss.* He takes out his frustrations on the people who work for him and the people who are really responsible to him. I used to fight him hammer and tongs. Finally they separated us and I don't think it has hurt me as far as business is concerned because now it is pretty generally recognized that that is the wrong way to do things and he has lost the bright light for himself. . . . That was really a frustrating experience in my life. And I put up with that for several years—really suffered for those years.

Q: And during that time, when things got tough, you just told him so?

A: Yes, and he screamed right back at me. We have these performance evaluations of all personnel, and he gave me the worst one that I've had since I've been with the company. To my knowledge it was completely uncalled for. . . . I ended up talking to the division manager about it, and naturally from the point of view of the organization he had to back up my boss. . . . It really shook me up, you know, to have him indicate that I wasn't even doing a good job at what I was doing. I tried to keep him informed as to what I was doing and what I thought was best, and he just completely overruled me in a lot of cases when I thought he was wrong. I fought tooth and nail with him because I thought they were wrong for the best interests of the company. Generally I found after a while that my approach to him was such that it made him mad, and when he got mad he couldn't think straight and he would purposely do the opposite of what I was suggesting, so I had to modify my approach. And I found that by avoiding colored issues and issues that would color his thinking I could pretty much get him to do what was right.

The situation with Executive's present supervisor is at once similar and dissimilar to the one above. Executive relishes the way he is also able to stand up to his present supervisor and speak his mind. Of his boss's vacation he says:

I kind of miss him, since he has been gone over a week and I don't have anybody I can yell to.

* In this connection note the reports of Executive's subordinates.

The pungent way in which Executive describes his disagreement with both superiors, in terms of "screaming" and "yelling," suggests that the very act of disagreement is not just a means of getting his job done but carries with it something of a forbidden thrill. But whereas Executive perceives his previous boss as giving him a poor appraisal in retaliation for his standing up to the boss, the reaction of Executive's present superior torments him by its uncertainty:

I think it is important to be recognized for the job that you do. And if this isn't given at a reasonable time after the job, I think you become a little doubtful about what other people think of you. And I found in my own case I know when I have done what I thought was a good job and I hadn't heard anything from the boss, I asked other people what they thought of it. Which was probably a way of seeking recognition from other people. . . . I am quite uncertain as to how my boss will react to what I am doing because I don't have a good picture of what his standards are. I know they are hard. That is about all I can say. And I wonder if I'm meeting them. And at the same time I am a little worried about going in the other direction in praising people down on the line who I think have done a job well, because they may be people my boss is considering getting rid of.

Executive speaks of his "boss" in quotation marks here. He describes the authority structure above him as in a state of flux which creates an undue amount of ambiguity for him and all those he works with; here "boss" is only his acting superior. The ambiguity created by his boss's standards is but a symptom, according to Executive, of an ambiguity which permeates the department. Executive's ambiguity score is high, and his tension score is at the top of our entire sample for the intensive study.

In Executive's relation with both his superiors, there appears a common psychic equation: "I want to stand up to you, but at the same time I want your approbation. If I *do* stand up to you, you will retaliate by withholding this approbation." For the erstwhile manager this withholding took the form of active disapproval; with the present manager it takes the form of unclear standards of evaluation. In both cases the organization is also perceived as being at fault, somehow entering into the conspiracy against Executive. In the former case the organization supported the stubborn, screaming superior; in the present case it contributes to a general ambiguity of which the evaluative ambiguity is a part.

Two general findings from the intensive study suggest that these

conditions may not be as idiosyncratic as they seem. First, persons coded as strongly seeking autonomy in their occupational roles tend to be relatively unclear about evaluations of them made by co-workers ($p < 0.05$). Second, persons seeking autonomy are more inclined than others to attribute low power to their co-workers ($p < 0.05$). This low attribution of power may serve to increase a person's feelings of autonomy by reducing autistically the amount of control others have over him. Low attribution of power may also, as with Executive, reflect his condemnation of the organization for supporting those who would limit his authority and withhold approbation.

Why should Executive assume that his attempts to gain autonomy from his superiors will be reciprocated by disapproval? Some additional insight into Executive's psychic equation concerning this conflict can be obtained from an examination of his relations with his own subordinates. Seeking autonomy himself, Executive is compelled to grant a guarded autonomy to those beneath him (or at least to assert that he does so):

I get a big kick out of seeing the people who work for me develop, watch their minds at work and keep an eye on them when they go off the track, why they do, and make sure they have the right kind of training in the background so that they can make the right decisions. There is a lot of interplay there, too. A lot of times they make the right decision whereas I would have made a different one, and they are right. It's very exciting to see these young fellows start to take hold, learn their jobs, and start to progress in them and come up with good answers. When you perform as a supervisor as you think it should be done, it requires you giving a little of both teaching and developing independence in them.

In this and in other descriptions of his supervisory tactics, Executive conceives of his supervisory activities as being guided by horticultural principles: he plants his subordinates in appropriate positions, props them up or prunes them back when necessary, and watches them blossom. Yet for such granting of autonomy to others, Executive must pay a price. The subordinates he must train are potential dangers to him:

The uncertainty bothers me, because you are going to have to meet people coming into the organization, knowing that there is going to be more competition coming—better qualified people, and real sharp heads. This is better for the company. There is no doubt about that. But you are getting into a situation where there is lots stiffer competi-

tion than you had in the past. This means that you are going to have to work a lot harder. And if you've been working hard all along, you wonder if you are really adequate for the job. This bothers me.

For maximum efficiency and for heightened productivity in the department, you have to see to it that people who come in are such that eventually they will be possible rivals.

The subordinates to whom Executive feels he must grant the autonomy he himself seeks are perceived also as threatening the security of his own position. Possessed of such ambivalence toward them, Executive's action is such that he is described by others in his cluster as "outspoken, too critical about personnel, overdominating, inconsiderate of others, unready to accept the views of others"—virtually all the terms of disapproval Executive at one time or another in his interview applies to his *own* superiors. That others put pressure on this executive who is prone to neurotic anxiety and seeks autonomy is not an isolated phenomenon. Other data from the intensive study indicate that persons high in neurotic anxiety and oriented toward autonomy are subjected to higher objective role conflict ($p < 0.01$) than those with lesser autonomy needs. Executive perceives his own superiors as retaliating against his struggle for autonomy because he projects upon them the threat he feels with regard to his own subordinates; he may even be projecting some of his own specific responses to subordinates upon these superiors. His desires and fears and his projections of these are reflected both in his relations with his superiors and his subordinates, and reveal him as a man who is threatened by his subordinates' struggle for autonomy and who retaliates against this threat.

In his attempts to work out his autonomy problems, Executive behaves toward his co-workers in ways which create conditions of objective role conflict, much as Superintendent manufactured his own "objective" conflicts. Like Superintendent, Executive tends to re-create his intrapsychic conflicts as objective role conflicts. The cases differ, however, in that Superintendent is able to cope with these derivative conflicts in such a way that his company reaps some reward from his overwork, even though Superintendent pays a heavy physical price for his hyperactivity. Executive, on the other hand, has objectified his intrapsychic problems into forms with which he is incapable of dealing; not only he but those about him are paying the price of his defensive maneuvers.

An intriguing biographical footnote to Executive's case is drawn from his early family history, some of the conflicts of which he may

be reliving on the job. Especially significant in the dialogue below are Executive's protestations that while he ended up following his father's career path, he was under no pressure from his father to do so:

- Q: Was there anything that your family had in mind for you, anything in particular that they wanted you to be?
- A: No, not at all. My father was in this business himself, and through my respect and admiration for him, I—just naturally being related to somebody who is intimately involved in this business—I became interested in it. But he gave me no impression one way or the other that I should go into this business or be a doctor or lawyer or anything else. Along the line during my education process I ran into teachers and other individuals who thought that I should be a lawyer—just from their observations of me.
- Q: But you felt that your family would accept pretty much whatever it was you wanted to go into?
- A: Yes. The decision was *completely* mine. My father helped me as much as he could when I finally decided that this was what I wanted to do, and I decided at a pretty early age.
- Q: About when was that?
- A: Oh, I don't know. There was never just any question in my mind. I just always wanted to be in this business.
- Q: There was never any time in your life when you wanted to be an airline pilot or—?
- A: Oh, just the usual kid stuff. But basically I still wanted to be in this business in one way or another. And actually my father arranged it so I could go down and work on the assembly line one summer, if I graduated from high school. You know, get out and be independent. I never had any trouble with being independent. My parents were pretty good in that regard. I mean they never tried to hold me down or anything like that. I try to do the same with *my* children—make them independent and self-reliant—let them go off on their own.

Core Problem Is Lack of Person-Role Fit

The second pair of cases—those of Mathematician and Sales Analyst—have as their common core problem the situation of an individual whose technical skills are inadequate for his job requirements. Sales Analyst compensates for this deficit by an excessive dependence on the skills of his co-workers. Mathematician might profitably have adopted a similar dependent solution to his similar core problem, but certain aspects of his personality prohibit such a solution. He chooses instead a coping mechanism which, though it may provide a tem-

porary prop to his self-esteem, is fated only to create derivative problems that further block an adequate solution to his core difficulty.

Case 3: Mathematician

Mathematician is a specialist in mathematical problems underlying the construction of missile-tracking systems. Unlike many of his co-workers, he holds a doctorate in his chosen field. He is employed in the missile development division of a large automotive company.

The missile division has only recently gained a position of great importance in this particular industrial complex. In the shift of the division from humored infant to major dollar-getter, Mathematician has been left somewhat stranded. The corporation created the missile division at a time when missiles were becoming things of the present rather than the future. In setting up the division, the company enlisted as key men a coterie of scientists whose orientations were toward "pure" research rather than more "applied" tasks. Mathematician was lured into the company by the prospect that he would have plenty of freedom to pursue his particular inclinations in theoretical mathematics.

The ivory-tower idyll of the missile development division was, however, short-lived. With the onset of the missile era the company realized that the capacities of the division lent themselves to immediate exploitation. Accordingly, nourished by contracts from government and other industries, the missile division has grown large. The size and complexity of the division staff have grown in the process, and the original group of scientists is now dispersed throughout the organization, many still in key positions.

In the company's other research departments, research is primarily geared to automotive areas, and a constant supply of work is fed these research adjuncts by the manufacturing parent company. In the missile division the situation is quite different. In order to sustain itself the division must seek research contracts from sources outside the parent company. If contracts are not obtained by the division, it will become a liability to the company. To the extent that the division is successful at contract getting and grows in size, the pressure to get future contracts grows correspondingly, since the "deadwood" the company would have to carry if contracts were not obtained is progressively increased.

These changes in size and function have placed new skill demands on the division's members. No longer does one's reputation center around being a pure researcher with wholly scientific skills. Now it is

equally important to be a scientist-engineer who can apply these skills, an administrator who can handle the division's increased budgetary and personnel problems, or a salesman who can get contracts for his department within the division.

We have seen in an earlier chapter how the interposition of an organizational boundary between a pure research staff and the administrative, sales, and technical staffs may promote and give form to conflicts between the research and nonresearch arms of an organization. In the case of Medical Administrator (to be discussed later) there is an analogous boundary between the medical and medical-supportive staffs of a company. In the medical department the division of labor is quite complete. Doctors are expected to be wholly medical men and administrators are expected to be wholly nonmedical. In the missile division, however, the separation is not so neat. The dominant power group in the division now consists of men who share the applied-administrative orientation, and they need not be fully versed in matters of pure research. By contrast those whose primary orientation is toward pure research are now expected to be efficient administrators, convincing salesmen, and adept at channeling their research activities into salable applied areas.

In this transition many of the division's original group of researchers have made a successful adaptation. While not necessarily abandoning their pure research orientation, they have either developed their own applied and administrative skills or have learned to make effective use of others whose skills compensate for their deficits.

Mathematician, however, has been dragged screaming into the present. As an individual who has a job with high creative demands in an environment which is not always sympathetic to such demands, he encounters many of the problems described in Chapter 7—breaks in continuity of research activity, excessive time spent in routine functions, and the like. The additional complicating factor for Mathematician is his reluctance to learn those nonresearch skills developed or compensated for by others in his division. He freely admits his personal inadequacy in this respect:

- Q: What kind of personal characteristics do you think somebody ought to have in order to do your kind of work adequately?
- A: Oh, I'd say he ought to be an outgoing sort of a person. A person who is well met, apt with dealing with other people. A good grasp of the English language. The type that would make a good bridge player or a good lawyer. And I don't think he should be too oriented toward doing pure research—if he wants to make a success.

- Q: Thinking of the contrary, then, what kind of personality characteristics do you think would lead a person to do poorly in this kind of work?
- A: Well, having neither of those characteristics, nor any research ability—a person is left with no legs to stand on.
- Q: So you feel then that perhaps you are not as outgoing as would be necessary to really fit in with the type of research proposal writing and—
- A: Yes.
- Q: Has that to do with the kind of politicking that is necessary to get contracts and things like that?
- A: Uh huh.
- Q: Now if it was your function to find a replacement for yourself on this job, what sort of a person would you look for?
- A: I'd look for a person with extensive hardware experience. I wouldn't feel right about hiring anybody on the basis of purely analytic ability and research skills for this job.
- Q: So in a way, then, you feel the ideal person for this particular job would be different from you, possibly in background, and also in terms of temperament perhaps?
- A: Yes.

In the above dialogue and in other parts of his interview, Mathematician is quite open about his failure to meet the objective requirements of his present job. He is in no way reticent to disclose his distaste with the current situation; he scores high on tension and lowest in the intensive sample on job satisfaction. In spite of these ominous indications, Mathematician does not appear in his interview to be defeated by stress. How is he able to maintain his self-esteem and keep himself at least equal to an unsupportive environment?

The germ of the answer to this question is apparent in the statements quoted above. He does not feel that he is a good salesman of research proposals, nor does he feel that he is adept in extending his abilities into areas of applied research. However, Mathematician does not feel himself inferior to the efficient proposal salesman and applied researcher. Instead, he regards with supercilious contempt those who possess what he lacks. Those who are efficient at selling research proposals are reduced to the status of "bridge players" and "lawyers"; those who are adept at applying research results to concrete, salable projects he terms "hardware" men.

For Mathematician, members of the missile division are thrown into one of two categories. The "good guys" are the old guard, the coterie of pure research-oriented men who participated in the early days of the division. He conceives of himself as a member of the old guard who are oriented toward doing fundamental scientific research, whatever

their current tasks. He makes snide remarks about organizational newcomers who apply performance standards with which he is unable to comply, calling them "Johnny-come-latelys" and accusing them of creating "divisional bad blood."

Mathematician manages to maintain an acceptable level of self-esteem by regarding himself as an inhabitant of an intellectual Valhalla far above the more crassly oriented Nibelungs. Describing them as of less important ability but more effective power, Mathematician says that they are:

... people who can talk fast and try to get by on purely their ability to talk fast. There are a number of such people I've encountered who have irritated me. It's frustrating to have somebody say the wrong thing and yet have them be able, so to speak, to keep right on saying it—just because they talk fast.

Mathematician regards himself as still a member of the research elite which first worked in the division, and his role senders indicate that they have been duly informed of this membership. He says that having a prestigious job is especially important to him, yet he defines prestige not in terms of observers' opinions but in his own terms. He respects only individuals in the organization who, like himself, cling to the image of the earlier division.

Mathematician insulates himself from the painful lack of certain requisite job skills by deprecating those who possess these skills. He could alleviate his difficulties by forming symbiotic relationships with those in the organization who possess that which he lacks. But Mathematician's character prevents him from forming relationships in which he is dependent on others, even if the dependence is reciprocal. One of the major things he says he looks for in a job is independence. He is perceived by co-workers as high in independence; he scores high on introversion as well. Dependent behavior is clearly inconsistent with Mathematician's interpersonal orientations.

Mathematician is thus presented with a dilemma. He has at hand an efficient means of compensating for his lack of certain skills: by forming symbiotic relationships with those whose strengths are his weaknesses. But his desires for independence preclude his adopting such a solution, and his contempt for those who *do* thus compromise their pure research ideals provides a justification for avoiding this solution.

Ironically, the avoidance of symbiotic relationships and his contemptuous attitude toward those with whom he might conceivably

form such relationships cast Mathematician into a more acutely difficult situation than that which he seeks to avoid. His inability to solicit outside contracts and his reluctance to enlist the aid of others to solicit for him make his department primarily dependent on work allocated by other departments within the division. His inability to make his department self-sustaining has reduced it to a subservient staff group which must go begging for its work. Others are not unaware of his effective dependence on them. When one role sender is asked what power he could invoke to get Mathematician to do something, he specifically points to "withholding his funds." Another co-worker, when asked how he could make things difficult for Mathematician if the latter refused to do something, replies that he could give Mathematician "a feeling of insecurity by not giving him much to do." With Mathematician's department thus placed in a relatively subservient position, he is subjected in unusual degree to the irritations which go with the attempt to do a highly creative job in an unsympathetic environment. Since other departments effectively call Mathematician's tune, he can offer little official resistance when these departments give him rush jobs, set deadlines, and interrupt the continuity of his activities.

Not surprisingly, Mathematician emerges as a person under unusually high objective role conflict. A substantial part of this conflict involves complaints about his inability to compromise with the demands of others.

He's the idea man. He doesn't always see the urgency of the situation.
 Very hard to get him to speed up.
 Once he wouldn't spend time on something he thought wasn't worthwhile.

He should be able to compromise.
 Lacks diplomacy, unable to put himself into the customer's position.
 His willingness and cooperative attitudes could be improved.
 He could be more active. It's hard to get him started and enthused.
 His interests are fairly narrow. The whole difficulty is getting him to do other things.

It's difficult to get him to write proposals when he's not interested.
 He should be more ready to collaborate as a team member, less of a *prima donna*.

In the case to be described next (Sales Analyst) we shall again encounter a person who lacks certain requisite job skills, but whose role senders are more pitying than condemning in their descriptions of him. A major difference between the two lies in Mathematician's

adoption of a cynical disdain toward the division's nontechnical staff as a way of reducing the ego relevance of his objective failure. Mathematician's hostility bubbles close to the surface throughout his interview. One sender complains about his cynicism, and a second says:

He can look into a problem and see its key point. That's made him enemies. It's all right to tell people when you're wrong, but you better not tell them when you're right. The problem is—he's always right. He makes people feel uneasy.

In such a form of intellectual one-upping, Mathematician uses his strengths to deprecate those who are strong where he is weak. Such an attitude, though ego supportive in part, extracts its price in the derivative problems it creates. It puts a burden on Mathematician's already strained interpersonal relations and makes more remote the possibility of his getting help. Moreover, in the eyes of his senders, Mathematician's style of coping transforms his inadequacy at doing certain things into an apparent desire not to do these things. Afraid to ask for help, Mathematician employs a set of defenses which prevent others from volunteering aid, because they are unable to see the helplessness which lies behind his mask of hostility and recalcitrance.

Case 4: Sales Analyst

Mathematician is not the only member of his company whom time has caught up with and passed by. In another department Sales Analyst also lacks certain skills requisite to high-level efficiency. He arrived at his present position by coming up doggedly through the clerical ranks, and was appointed Chief Sales Analyst when this department's primary responsibility was transmuting information about his company's yearly sales into forms that could be comprehended by other departments. Over the years, however, the departmental functions have broadened beyond simple data reduction, and now include forecasting sales on the basis of sophisticated analyses of previous sales records and various industrywide economic variables. The requisite skill level of Sales Analyst's job has changed accordingly. One of his role senders describes the current situation thus:

You see, he has a serious weakness, a drawback. He started with the company as a messenger boy. When he wasn't running errands, he'd hang around the auditing department. Figures fascinated him. Little by little he raised his position in the company until today he is a division head. He has, however, no training for the job. He has picked up all

he knows through experience in the company. But company policies have changed to some extent. Today they want college men. And it is important that men who are in supervisory positions should have formal education and some experience in the operational end of the industry. He has neither, but the men under him *do* have these requirements. I asked the company to assign him to some field operational job for a year or so—to give him an opportunity to learn about field operations which would help him later in sales analysis work. They refused. Next, I asked if he could participate in the vocational courses the company offers. That was refused too. They feel he is too old, that it is ten to fifteen years too late.

It appears in this Horatio Alger story with an unhappy ending that not only is Sales Analyst inadequate for his job in its expanded form, but that he may have been underqualified from the start. Sales Analyst is himself aware of these limitations:

Q: Would you like to make a job change in the future?

A: Oh, I doubt it very much.

Q: By job change I mean within the company as well as changing to another company.

A: No, I have no aspirations of job changing within the company itself. If a job change did come along I guess it would be the other way around—the company would change it for me.

Q: Any particular reason?

A: Well, for one thing I don't have the background that would enable me to get a job that the company would feel that I could hold. I think that I have gone about as far as I can from that standpoint and, well, I just don't have a college background.

Like that of Mathematician, the core problem of Sales Analyst's job is a discrepancy between job demands and personal capabilities. The solutions chosen by these two men are, however, in sharp contrast. Sales Analyst's principal coping response is described as follows by his immediate superior:

He knows how to draw up all the reports. He knows the analysis procedures, but he knows nothing about the other operations so he must rely for his information on subordinates who do have the broader background and higher education. The condition is worrying and embarrassing.

This compensation for personal deficit by dependence on others—a solution anathematic to Mathematician—permeates Sales Analyst's in-

interview. When asked what he does when he faces a job crisis, he replies:

I might mention it to the office manager, or to the chief of sales and they question me as to why I think so and see if they can't help me in some way to alleviate it to some degree. . . . The office manager and the sales chief have other possibilities of approach to the problem that I don't have.

He describes a situation where his work was piling up as follows:

As long as management was aware of it, I felt that the only thing was to keep going as far as I could and then management would provide me with their decision so that I could go ahead and handle this problem.

When asked the extent to which he has realized his job ambitions, he replies:

Well, I would say that it was through the help of a lot of people that I have worked with through the years that I have got to the place where I am today.

Q: Thinking of your own job, what sorts of personal qualities would a person need in order to do it well?

A: Well, I think he has got to be patient for one thing and at the same time I think he has got to be the kind of fellow that could get the most out of people and not rub them the wrong way. He's got to recognize too that this is not a one man job. . . .

In addition, his last major reported stress occurred when he found himself deprived of adequate help from subordinates:

Q: Could you tell me a little bit about the time you were in a stressful situation here on the job?

A: Yeah. The last time I really had it rough was when we had a big personnel swing about two or three years ago—four years ago. I had about three, four, or five new fellows and it was a case of how well we were in the position of training them for this year-end work. I worried pretty much about that because when the year-end reports came around I wasn't too sure that this wasn't going to get into a bottleneck or not, but we came out of it pretty well. I really sweated that one out.

Both Mathematician and Sales Analyst admit of some personal shortcomings in a general way. Mathematician, however, deprives them of

ego relevance through his identification with what he regards as the only organizational elite group. Sales Analyst accepts his limitations more stoically and tends to regard himself as lucky to have gotten as far as he has. Both, however, fail to attribute any specific crises they encounter to their own shortcomings. For both men the immediate stressors are perceived as created by external forces, not personal deficit. Mathematician readily attributes difficulties to identifiable co-workers whom he regards as unsympathetic, malevolent, or stupid; he speaks vividly of the agents in the organization who are causing him trouble. Sales Analyst's perception of sources of his immediate stresses is not only externalized but depersonalized as well. According to Sales Analyst, no one in the organization ever does anything bad; all are the innocent victims of impersonal circumstance. When he or anyone else in the company has trouble, it is always a function of the fact that "the material didn't flow," or it's "the way things jell," or "it's my turn now." Even the foremen in his own corporation who are faced with the impersonal demand of the assembly line are more ready than Sales Analyst to attribute breakdowns to human frailty.

Such an organizational view is singularly appropriate to Sales Analyst's dependent solution to his core problem. He needs his co-workers too much to antagonize them. To prevent himself from antagonizing, he must remove all temptation to express hostility; he thus perceives their faults as he perceives his own—as generated solely by circumstance. One can hardly blame a fellow victim, however much he may offend.

Not only must Sales Analyst suppress any hostility toward co-workers; he must go out of his way to enlist their support. But his bases of influence are somewhat restricted. He obviously cannot rely on expert power, by appealing to their trust in his special knowledge or abilities; nor can he risk attempts at coercion. His stock of rewards is limited. Clearly he must ingratiate himself through the use of referent power, by appeals to the friendship between himself and others. Little wonder that the most important quality he thinks one in his job should have is the ability to get the most out of people without rubbing them the wrong way. His stature as a hail-fellow-well-met introduces some derivative problems, however. He is accused by role senders of being "of a free and easy going manner . . . a little more free than he should be . . . not businesslike enough . . . too friendly with his people . . . lacking in the same professional attitude as the men he is working with . . . too much one of the boys." His subordinates have two major complaints about his behavior. They complain first about his lack of assertiveness with his superiors. It is understandable from his other

behavior that he is unwilling to oppose the wishes of his superiors. But understandable or not, this reluctance hampers his efficacy as a supervisor, because he cannot represent with any force the wishes of his subordinates. He is in this way representative of the situation noted by Likert (1961) wherein a supervisor's efficacy in rewarding his subordinates is restricted by his lack of influence with his *own* superiors.

A second major complaint about Analyst's supervisory behavior reflects his probable ambivalence toward his subordinates. They complain that he "oversupervises," is deficient in the skills of personnel administration, and "fails to rate subordinates on individual merit, lumping them together." Since many of these paradoxical descriptions of Sales Analyst as "too nice a guy who is not nice enough" come from the same role senders, the discrepancy cannot be attributed to different points of view from different respondents.

Apparently excesses of both tolerance and paternalistic control are characteristic of Analyst's behavior. It is likely that he expresses in this way his ambivalence toward them. Since he is constrained from consciously blaming people who cause him trouble, his irritation toward them reveals itself in minor, erratically hostile ways. In addition, the amount of hostility he harbors unconsciously toward these subordinates is probably more than the accumulation of routine workday irritations. Not only is his status somewhat threatened by subordinates who are objectively more skilled than he, but it is also likely that he harbors some unconscious resentment toward these subordinates who, for all practical purposes, control him rather than vice versa. Such hostility is held in check only by the fear that if he pushes his subordinates too far, they will withdraw the aid he needs so vitally.

Core Stress Is Generated by the Environment

Case 5: Medical Administrator

Medical Administrator and Sales Analyst have a common derivative problem: both men rely excessively on subordinates and thus have somewhat unstable relations with them. The sequences of core problems and attempted coping behavior which generate this ultimate communality differ in the two cases, however. The core problem in Sales Analyst's case is a mismatch between person and role; Medical Administrator's core problem seems to lie less in himself and more in the

conditions of his job. Both Medical Administrator and his organization have achieved a workable solution to this core problem. Derivative problems have been created in the process, but Medical Administrator is capable of coping successfully with them also, at least in part.

The medical department of this large company performs two distinct sets of functions: professional (dealing with the medical aspects of the doctor-patient relationship) and nonprofessional (covering paperwork, supervision, and other administrative activities). Medical Administrator, who has no medical training himself, supervises the nonprofessional activities of the division. He deals with two distinct groups of people: the nonprofessional staff under him and in other departments and the professional staff of doctors and nurses. His supervisory authority is limited to the nonprofessional staff; the professionals report to the Assistant Medical Director, a doctor. Medical Administrator's own superior is a doctor. Administrator's major functions are to provide services for the professionals: budgets, publications, records, supplies, statistical reports. The performance of these activities obviously demands close cooperation with the professional staff. Administrator also serves as the principal liaison between the medical division and other divisions—personnel and salary administration, accounting, and others.

Such a job is rife with potential boundary conflicts. Administrator must supply his subordinates with a predictable and manageable work load, but the size and predictability of the work load are determined by the medical staff over which Administrator has little influence. He has to manage his department in an environment which is in certain crucial respects beyond his control. He plays a staff function in relation to the professional group, but he is the major line officer for the sizable group of nonprofessionals. The locus of control in the division is with the doctors, yet Medical Administrator must represent the demands of his nonprofessional personnel, bargaining in their behalf from a position of relative weakness—a power problem similar to that of Sales Analyst. The origin of Administrator's conflict lies in meeting the demands of three sets of role senders at three distinct points in the work-flow structure: the powerful professional staff who set the pace of his department and to whom he is directly responsible; his own subordinates whom he must shield occasionally from excessive demands of the medical staff and to whom he must give some feeling of departmental integrity; and the nonmedical divisions who receive much of his department's clerical output and who also set standards of quality and quantity for his group.

To what extent does the core conflict or its ramifications appear full grown in the behavior of Administrator and his role senders? The following are some indications of the overt conflicts surrounding him:

1. Conflict of authority between professionals and nonprofessionals.

Q: Do you ever have the feeling that you wish you could just ignore what the doctors say and go ahead and do it the right way?

A: Positively.

Q: But you can't do that very often?

A: Not very often, unless, of course, the Medical Director isn't there and I have to make a decision. Then I will do it, even though I'm not sure it may be what he wanted.

Viewing this conflict through other eyes, the Medical Director says of Administrator:

He has a tendency when I'm not here not to look for similar authority in the next person who is in charge. In other words, in my absence he makes decisions himself when he should consult with my second in command.

2. Inconsistencies in the definition of Administrator's authority. Even the Medical Director is not wholly consistent as to the degree of authority he wants Administrator to assume. One of the Medical Director's most frequent complaints, in spite of his above criticism, is that Administrator does not take on enough individual responsibility in certain areas, even in some areas which come close to the medical-professional sphere of responsibility.

3. Contradictory role sendings from superiors.

I'm thinking specifically of Dr. Smith and Dr. Bartolo and some of the things they have wanted done. One will want it one way, and one will want it the other way. And until they get together and decide how they want it, nothing is done.

4. Uncoordinated sendings from doctors which result in overload.

Dr. Bartolo may want me to get out some special statistics on patients for him, for a talk he's going to make or something on that order, and then one of the other doctors may come in and want another different type of report for something *he's* going to do.

5. Breakdown in the communication chain from the doctors to the nonprofessional staff. Administrator says of his boss:

I sometimes don't think he expresses himself clearly as to just what he does and why. He doesn't know how to tell what is right so that it comes across to me.

On the other end of the communication chain, Administrator's subordinates voice similar dissatisfaction with his failure to keep them informed. From their point of view the blame is wholly his, and they fail to acknowledge the possibility that he may be a communications middleman transmitting inadequate input.

6. Overload in rush jobs arising from the possible lack of consideration on the part of the medical staff.

A: I'll be requested to do a rush job on some certain report which we could have been told about weeks ago and done a better job perhaps.

Q: Are you doing anything now to try to avoid these rush jobs?

A: Well, I don't think it's something too much can be done about because we aren't aware of the fact that we're going to do these things.

Administrator feels that he can't very well refuse such rush jobs but that he must protect his own subordinates from pressure and disruption. Consequently he does many of the rush jobs on his own time.

It is easy, however, to overestimate the magnitude of these difficulties. References to them by Administrator are often coupled with qualifications suggesting that the problem is neither severe nor frequent. The conflict of authority between professional and nonprofessional areas of responsibility is mentioned explicitly only once in the interview, and even in this reference Administrator does not describe it as conflict; he just says he "goes ahead and does it" without mentioning any ensuing negative sanctions. Contradictory sendings from superiors are handled by Administrator in a routine and apparently successful manner:

Q: When you find out that they want it done in different ways, what do you do about it?

A: It depends on who comes to me first. If Dr. Bartolo should come I would tell him that Dr. Smith had asked me to do it this way. And then normally the three of us will get together and we'll iron it out and determine how it should be done.

Q: And that usually works pretty well?

A: Yes.

Q: Do you have difficulties getting together on some of these things?

A: No.

What of the overload of tasks resulting from uncoordinated sendings? According to Administrator, "Normally they're not urgent; it's just a question of doing one and then doing the other. It's rarely any clashes." Does the overload ever reach the point where he is unable to meet the demands? He indicates that "it *could* happen, but it doesn't reach the point where it *does* happen." And with reference to the rush jobs mentioned above:

Q: How often do you have a rush job?

A: I wouldn't say more than three or four times a year.

It begins to appear that the problems enumerated earlier, though potentially stressful, are not so experienced by Medical Administrator. One might say that he was denying the stress generated by these events, were it not for the fact that his other self-descriptions are in many respects too unflattering to suggest that Administrator puts up a good emotional façade in adversity. Furthermore, he is not reticent in providing information about these problems.

Medical Administrator is under high sent pressure from his role senders, but the content of these pressures does not directly concern any of the problem areas described above, except for the complaint of the Medical Director that Administrator occasionally makes decisions beyond his authority. There is virtually no direct relationship between the potential difficulties outlined above and the content of the pressures being put on Administrator by his role senders; there are relatively few complaints from senders about his performance.

Medical Administrator's organization has separated the activities of the medical department in such a way that few people are overtaxed. The doctors are not expected to be good administrators, nor are the administrators expected to be doctors. Moreover, there is little doubt on anybody's part that the professional medical staff legitimately has the greater power. Yet an effective division between technical and administrative activities is difficult to maintain in everyday operations, and there remains in the medical department the potentiality for boundary difficulties. What is particularly interesting about Medical Administrator's case is his personal technique for avoiding the potential professional-nonprofessional conflict, and maintaining in the process both his own self-esteem and that of his subordinates.

Medical Administrator's principal technique for solving these problems is to "cocoon" his job by restricting his areas of work and responsibility, and by convincing himself and possibly his co-workers

that he and they have very specialized skills in areas in which the doctors are incompetent.

The tendency of Medical Administrator to restrict his area of responsibility is particularly clear in the interview of the Medical Director, who is the only role sender with an appreciable number of activity-oriented complaints about Administrator. The Medical Director says that Administrator should:

- . . . assume a greater responsibility in relation to supervision.
- . . . assume a greater degree of responsibility as to the accuracy and promptness of publications. Take a more forceful role on getting the material edited and reviewed by other members of the review board.
- . . . be a little more aggressive in getting the statistical reports in.
- . . . be more aggressive in his work.

On a third of Administrator's activities, the Medical Director wants him to spend more time than he does now. Some of Administrator's extradepartmental role senders also complain that he is not extending himself as much as he should. A member of the personnel department thinks he should attend personnel meetings more often and spend more time in supervision; a role sender from insurance says Administrator should ". . . show a little more initiative. Sometimes you ask him a question which I know he could answer, but he'll go to someone else." This shying away from decision making is an acute source of stress in the rather hostile association between Administrator and the head nurse. Administrator complains bitterly that the nurse is "always bugging him" by running into his office and asking him "to make up her mind for her"; the nurse says that Administrator does not keep her sufficiently informed on many matters. The nurse, of course, is on the *professional* staff, and many of her difficulties are presumably professional ones. Perhaps some of Administrator's hostility toward this nurse is caused by her tempting him into that precarious borderline area of decision making between nonprofessional and professional. When Administrator *does* make a rare decision in this area, as we saw earlier, the Medical Director complains about his acting outside his sphere of authority or competence.

In short, Medical Administrator has kept the potential authority conflicts in the medical department in a rather delicate balance by taking up a defensive position, retreating into the cocoon of his own section of the department, and not sticking his neck out. This coping mechanism has its price, however, in terms of the derivative conflicts it engenders. The role senders quoted all complain about Administrator's

reluctance to be more aggressive and make more decisions. Pressures along these lines generate part of his role conflict. The immediate source of these pressures, however, is his derivative defensive maneuver, *not* the core conflict.

But is Medical Administrator content to function in this small, autonomous second-string universe? How can he maintain his occupational self-esteem under these conditions? Resentment of professionals by their nonprofessional associates is not uncommon. Does Medical Administrator express any resentment of this sort?

Q: I'm trying to put myself in your position and I would be faced with a lot of difficulty in trying to satisfy their (the doctors') status and so on.

A: Perhaps, say if you were new in the department, you might feel that way, and I would say that my assistant possibly feels that way—because he's been with us only two years. And, of course, I've known all the doctors for many years and perhaps that makes the difference in relationships.

Q: Perhaps you worked this out a long time ago?

A: Yes.

Administrator, however, does not deny resentment toward the doctor who held the medical directorship before the present Director:

Q: Did you feel that he didn't have the respect for the nonprofessional people that he ought to have had?

A: I thought he had very little, and in fact, I think most people in the department felt the same way. Doctors as well. There was a general feeling, you might say, that the employees were just slights. He often remarked, "Well, these people just aren't close to things, just do the work, don't think about it."

Q: Is this often the case?

A: I never ran across it before. This is the first time I ever had a superior of this type. I'm afraid it's most unusual.

Q: In some companies with large medical staffs, I get the picture that some of the doctors look down on the nonprofessional people.

A: I would say I've run across this.

At one point in the interview a similar resentment toward the present Medical Director manages to peep through:

Q: Does he ever try to get you to do anything that you consider lies outside your job?

A: Yes.

Q: What sort of thing would that be?

A: Well, when he asks me to go to the drug store down below and pick up something for him. Something along that order. That's the chief thing I can think of off-hand.

Q: Do these kinds of things happen very often?

A: Oh, no.

Q: Does he look to you as a personal assistant, sort of, as well as a . . .

A: I have the feeling frequently, yes. Stuff his secretary, things I think his secretary should do, he'll call me in instead, and of course, I don't say anything about it.

These are the only expressions of resentment toward the doctors that Administrator permits himself. He guards himself against acute incidents by minimizing the frequency and intimacy of his personal contacts with the professional staff. One doctor says of him:

. . . he's maybe a little formal, a little stiff—I mean maybe not quite as warm and friendly as he might be—not unfriendly, but you can't joke with him very much. You ask him for the technical part of his job and that's it, and if there's some problem you discuss it with him, yes, but it's usually an exchange of information rather than anything social.

Once more Administrator's defensive maneuver of isolating himself from the professional staff has created a derivative complaint. But these are only his ways of protecting his self-esteem from the onslaughts of others. Of greater importance to understanding Administrator are the focal qualities of his self-concept—the possession of a unique set of skills which he regards as peculiarly appropriate to his job and important to the department. His interview is full of references to his personal skills and experience, and these references occur too frequently and with too little immediate relevance to be regarded as routine commentary. Faced with the knowledge that he cannot do what the doctors can, Administrator counters with the assertion that the doctors do not have equally essential skills which he possesses. This conviction not only prevents him from having to face the reality of his second-string position but even permits him to sneer at the doctors' incompetence in his area:

In all the years I've worked with doctors, I've never considered them to be good businessmen, or organizers.

Administrator seems perhaps consciously to have surrounded his subdepartment with a skill mystique which keeps the doctors at a re-

spectful distance. He places considerable emphasis on the statistical work of the department and perhaps tries to "one-up" the doctors in this area. One of the doctors interviewed speaks specifically of the statistical reporting:

He is dealing with a subject that I don't know very much about. In other words, I don't know much about statistics; I don't know how they are supposed to be done, I don't know whether anybody does really, but they come up with procedures in their own field that they know more about than I do. I can't be very well too critical of them. I can, I may disagree with it, but I can't really say I have a better way of doing it because I *don't*. I mean sometimes I don't understand at all.

One suspects that Administrator makes the most of the statistical mysteries of this job in partial retaliation against the doctors for throwing *their* professional weight around.

In sum, Medical Administrator attempts to handle his potential conflicts by emphasizing and fencing off those functions which he feels himself uniquely qualified to handle. Within this possibly artificial dominion he regards himself as the ultimate qualified authority; here he finds some contentment in spite of the narrowness of the domain and the possibility that even within it his personal competence and authority may be illusory. (Two of his role senders question his statistical competence.)

Administrator has applied similar techniques to satisfying his self-image with respect to long-range career goals. He views the skills of medical administration as very specialized and consequently limited in their applicability. Moreover, he does not regard himself as especially competent outside this realm. In either the medical or administrative fields he is far below the top, but within the hyphenated combination of them he feels near supremacy.

We have already touched upon two issues over which pressure is being exerted on Administrator: his failure to assume responsibility and his failure to communicate adequately. The third and perhaps major portion of the complaints against him deal with his personality. According to his scores on the personality inventory, Administrator is conspicuously low on anxiety-proneness and high on introversion. His role senders rate him lower in assertive self-confidence than any other focal person in the sample.

Medical Administrator is no expansive go-getter, but his limitations are quite suited to handling the potential and actual conflicts in his situation. A more aggressive, expansive person could not have responded to the potential conflicts of the role by limiting his sphere of

influence as Administrator has—not without chafing at the bit or becoming a petty tyrant in his own subdepartment. A person more emotionally sensitive and anxiety prone could not bear the occasional slights and intermittent emergencies with the nonchalance that Administrator exhibits.

But his personal style, ego syntonic though it may be, has nonetheless generated pressures from his senders. He is accused of not supervising closely and firmly enough. Secondly, he is accused of not being sufficiently warm or understanding, of being too shy and retiring with subordinates. One sender says that he "excels at handling personnel and is *too* good natured"; another says that "I wish he weren't quite so shy. He's very bashful; quite reserved. But the girls think he's high hat—which he isn't." To this picture of Administrator's interpersonal relations must be added what he considers his paramount source of stress: having to discipline employees. He becomes quite disturbed immediately before a disciplinary interview with a subordinate. And when asked "What part of your job do you find most satisfying?" he says "I would say my relationships with other people in the department."

The emphasis that he puts on his relations with subordinates as a source of pleasure *and* anxiety suggests that he has considerable emotional involvement with them—parallel to the excessive functional dependence Sales Analyst has on *his* subordinates. We have seen earlier how Administrator has made his subdepartment into an isolated microcosm. Within such a microcosm another person might have become a martinet, but such behavior would be inconsistent with this Administrator's personal style. Instead he has set himself up as a benevolent paternalistic figure who loves his wards unduly; he shies away from supervising them closely and experiences anxiety when he must discipline them. But he seems unconsciously to harbor some resentment toward his subordinates; as possessors of his affection, they can be perceived as threats when they fail to reciprocate it. This ambivalence is reflected in his shyness and apparent aloofness in their presence, much as Sales Analyst's ambivalence is reflected in erratic alternations between being "one of the boys" and a harsh disciplinarian.

Case 6: Credit Expediter

The core problems of Credit Expediter, like those of Medical Administrator, are departmental boundary conflicts. Credit Expediter's company has divided and departmentalized two functions whose ends are in the short view sometimes contradictory: sales and credit. The

company's ultimate aim, of course, is not only to make a sale but to collect on the sale. The company's credit policy is flexible, permitting the unprecedented extension of liberal credit to certain customers in order to make important sales. The decision of how liberal to be with credit is complex, requiring considerable insight. To simplify such decisions and to reduce the skill level required to make them, the company has made sales and credit two autonomous departments, each with its own decision-making structure (much as the medical and administrative functions were departmentalized in Medical Administrator's case). This division of credit and sales has transformed conflict-ridden decisions into conflicts between departments. No longer is the weighing of sales advantages and credit risks placed in the hands of a single individual who must compromise divergent implications as best he can. Now the two decision-making criteria are embodied in different individuals, each of whom is interested primarily in getting across his particular vested interest, that is, "making the big sale" versus "minimizing losses from accepting bad credit risks."

In some organizations the members of credit and sales departments might be restricted to subordinate positions, with the decision-making power in ambiguous cases residing in an organizational authority above both departments. Such an authority does not effectively exist in Credit Expediter's company. Instead, the company has granted considerable decision-making autonomy to the two departments in question. In granting such autonomy, it has made one ambiguous proviso as to the determination of paramount interest. This proviso can be paraphrased as: "The interests of sales always come first, except where the interests of credit are more important." The absence of rules for defining the exceptions makes the proviso ridiculous as well as ambiguous. In rare cases the decision may be made at higher levels. But these already over-taxed levels exhibit great delays in making such decisions, and usually stipulate that the decision is not intended to set a precedent; such a situation hardly helps the credit department to make a decision about credit when a similar problem arises again.

The credit department is thus set against another department which has goals frequently incompatible with its own and which has somewhat higher power. The credit staff are forced to operate within an organizational policy which appears to them vague, if not capricious. The conversion of individual decisional stress into interdepartmental conflict has created a number of boundary problems for Credit Expediter; these problems were discussed earlier (Chapter 6). He frequently finds the sales department trying to induce the customer to increase an order while the credit department is simultaneously planning to re-

duce the amount of credit extended to this customer. As a further complication Credit Expediter often is asked to assist the sales department in making a sale to a customer whose credit he plans to restrict. His reaction to all this?

It worries me. I just can't forget something after it's done, and come back and do the next thing. It's on my mind. It was on my mind at three o'clock this morning. I woke up thinking about it.

The affective reaction of Credit Expediter to these boundary difficulties is one of guilt and anxiety (instead of the hostility toward sales that might be anticipated). Some insight into this reaction to a boundary stress may be obtained by reviewing his career history. At one time Credit Expediter was an admittedly ambitious member of the sales department. He saw some openings at the top in sales, but felt he needed "broadening" before he could go any higher in that department. To obtain such broadening experience, he switched to credit, presumably a temporary move. Subsequently the ranks tightened up in the sales department to the point where Credit Expediter no longer sees any hope of getting back into sales without taking a demotion in the process; there is simply no opening in sales at present or in the near future at his salary level. Not only is Expediter's heart set on someday rejoining sales; he admits that he does not now, nor did he ever, like credit work. He feels no attachment to credit, yet foresees no future with sales because of the lack of equivalent openings and his inability to tolerate demotion. The ambition which took him out of sales in the first place now precludes his return.

Such a coupling of ambition and outgroup identification intensifies the stressfulness of an already difficult situation. Credit Expediter, like Medical Administrator, has attempted to resolve his boundary problems with a total absorption in the interests of a single group on one side of this boundary. Unlike Medical Administrator, however, Credit Expediter has cast his lot with the group on the side of the boundary *opposite* from his own formal position.

The derivative conflicts following such a solution result from the fact that the credit department is not populated with people who share Credit Expediter's outgroup identification. The rest of the staff are "credit men" psychologically as well as nominally.

Some of Expediter's role senders say that he is "a good man," and "the best credit man we've ever had," or that he "should be Credit Manager." But the senders who say this are all from sales, not credit. Note especially the phrase "best credit man *we've* ever had," a singu-

larly appropriate compliment from sales in light of the fact that Credit Expediter is indeed their man. Expediter's co-workers in the credit department are less enthusiastic in their evaluations.

Yet as much as he might wish to be in the sales department, Credit Expediter cannot wholly divorce himself from feelings of responsibility toward his subordinates. As an ambitious and conscientious individual, he tries to meet the demands of these subordinates, particularly since their performance ultimately reflects on his own executive capabilities. As a result he suffers guilt born of compromising the interests of those who depend on him in favor of the demands of the opposing side (a feeling not unlike that of a football player who in the service of some larger and locally incomprehensible value knowingly runs the wrong way with the ball).

Such a feeling of guilt is intensified by the ambiguous company policy about priorities in conflicts between credit and sales. Credit Expediter views himself as a down-the-line "company man." He feels that what is good for the company is good for him. Moreover, he equates the company's best interests largely but not completely with those of sales. He thus cannot make a comfortable decision; he is tormented by the thought that he may have sold out his own men, acted against the best interests of the company, or deserted old friends.

In the process of instituting a boundary between credit and sales and locating this particular person on that boundary, the organization has suffered losses and gains. First, the morale of the credit department has been weakened, perhaps with some balancing gains in the sales morale. A second series of consequences is more subtle. The impetus for setting up the sales-credit boundary was to alleviate strain on the decision-making powers of those who would have to weigh complex considerations of sales versus credit—that is, to reduce the intra-role conflict. This boundary created a situation ripe with potential interdepartmental conflicts. But the company chose to place at the critical boundary position an individual whose body was on one side but whose spirit was on the other. A potential interdepartmental conflict was thus largely transformed into an actual intrapsychic one. The irony lies in the fact that the problem the company set out to solve by interposing the boundary—relieving single individuals of conflictual decisions—has been instituted afresh. Not only has it been reinstituted; it has been intensified. Decisions which might have been difficult and conflictful have now taken on the additionally stressful property of being linked intimately to one man's identifications and ambitions.

19

The Management of Organizational Stress

THIS HAS BEEN a study of organizations and some of their unintended effects on the people who work in them. Organizations were not invented, of course, to damage their members, and they are not run for that purpose. As one executive murmured regretfully, "It just comes out that way." It does indeed come out that way for many people; the nature, the extent, and some of the reasons for this costly form of industrial accident were the subject of our research.

In concentrating on such side effects of organization, however, it is easy to fall into the trap so often occupied by those who deal with illness rather than health. If one focuses only on people's troubles, the whole world appears disease-ridden.

We reject this tendency. We recognize the positive contributions of work and organizational membership, not only to standards of consumption but to the meaningfulness and enjoyment of life. Four out of five men claim that they would continue working even if they inherited enough money to make work economically unnecessary. Moreover, in explaining this widespread view most of them emphasize the contribution of work to the content of their lives. They speak, on the positive side, of the need to keep occupied and interested, and on the negative side of feeling lost and directionless without work. When asked to think of the things they would miss most if they were not allowed to work, more mention friends, "the people I know," than any other single factor (Morse and Weiss, 1955; Weiss and Kahn, 1960).

These attitudes reflect a recognition of the positive functions of work and organizational membership; they do not imply, however, an ideal-

ization of particular conditions of employment. The majority of men would like to continue working—but not at the same job! People who are bound tightly into large organizations (especially their lower echelons) are most emphatic in stating that, were they to work without economic need, they would do so in a different job. The people who are most certain that they would continue in their present jobs come from the least bureaucratized occupations—the professions and farming. These responses are consistent with the idea that work is important scarcely less for the experience of working than for the sake of consuming the products of work.

Our assertions about organizational conflict and ambiguity are best assessed against this background. The positions under study in our intensive research design were not selected for unusual stressfulness, and the respondents in the national survey were chosen for representativeness, not to dramatize the problems of organizational conflict and ambiguity. These problems are by no means universal in organizations; there are organizations and positions in which harmony and clarity are the dominant conditions. We have treated conflict and ambiguity as dimensions for the study of organizational roles, not as unvarying attributes of organization. We do assert, however, that conflict and ambiguity as conditions of organizational life are commonly encountered, that they express deep trends in contemporary social organization, and that they are in opposition to still deeper needs of individuals.

We assert also that the difficulties people have with their organizational roles increase as conflict and ambiguity increase, and that these difficulties are expressed in performance, not necessarily in the role in which the stress was experienced, but somewhere in the array of roles which constitute the social and affiliative life of the person—as husband and father, as worker, as friend, and as citizen. Where these expressions will occur, what forms they will take, after what intervals of time and silent pain they will become manifest, our research and theory knows little. About these things we have much to learn.

This has been not only a study of organizations, however; it has been also a study of health, in the sense of psychological well-being. In this context role conflict and ambiguity constitute two stressor conditions out of many which might be investigated in and outside of organizations. In other studies related to this research, additional stressors are being considered. These include status and status incongruence, as when a highly trained and formally educated person is employed in an unskilled position. They also include temporal discontinuities imposed on individuals and groups, as among industrial workers and their families who are subjected to recurring changes in shift. Another environ-

mental stress being studied currently is technological obsolescence, and the resulting experience of discovering that a laboriously acquired and highly valued skill, around which there has been investment of self and the development of self-identity, is becoming de-valued in one's organization and in the larger society. We are interested also in the effects on the person of negative feedback about the self, as for example when a hierarchical superior in the course of an appraisal interview states that performance is unsatisfactory.

All these researches share an orientation toward a few key questions: To what extent are individual well-being and performance similarly affected by stressors of various kinds, and to what extent do their effects appear to be distinct? What are the social and organizational conditions which give rise to the immediate stressors, and what qualities of personal and interpersonal relations mitigate the effects of stress?

Finally, the present research is a study in organizational theory or, more properly, in the organizational application of role theory. We have attempted to bring into the same theoretical schema the organization as an ongoing system, the work group, and the individual. The key concept in this attempt has been *role expectations*, those cognitions of relevant other people about what the occupant of a certain organizational office should and should not do. In these terms, the influential communication of role expectations begins the basic cycle by which organizational performance is insured; in the communication of expectations also we have discerned the immediate origins of role conflict and ambiguity.

We have regarded an organization as made up of an array of overlapping role sets, each consisting of the individual occupant of a certain position and those other persons whose behaviors must interact with his in the creation of the organizational product. We have been interested in the process of influence from role senders to focal person, in the clarity or ambiguity of the expectations transmitted, and the harmony or conflict in the total pattern of expectations communicated to any single position. We have been interested in the consequences of such differing patterns, and in the bases of power by which the expectations of one person have effects on another. We have wanted also to learn something of the prevalence and location of conflict and ambiguity in the society as a whole.

The theoretical model for this research began with a discussion and diagram of a role episode (Chapter 2), that is, a cycle of events which can be regarded as initiated by the communication of a set of expectations to a person from others whose activities are interdependent with his (focal person and role senders). The role episode ends with some

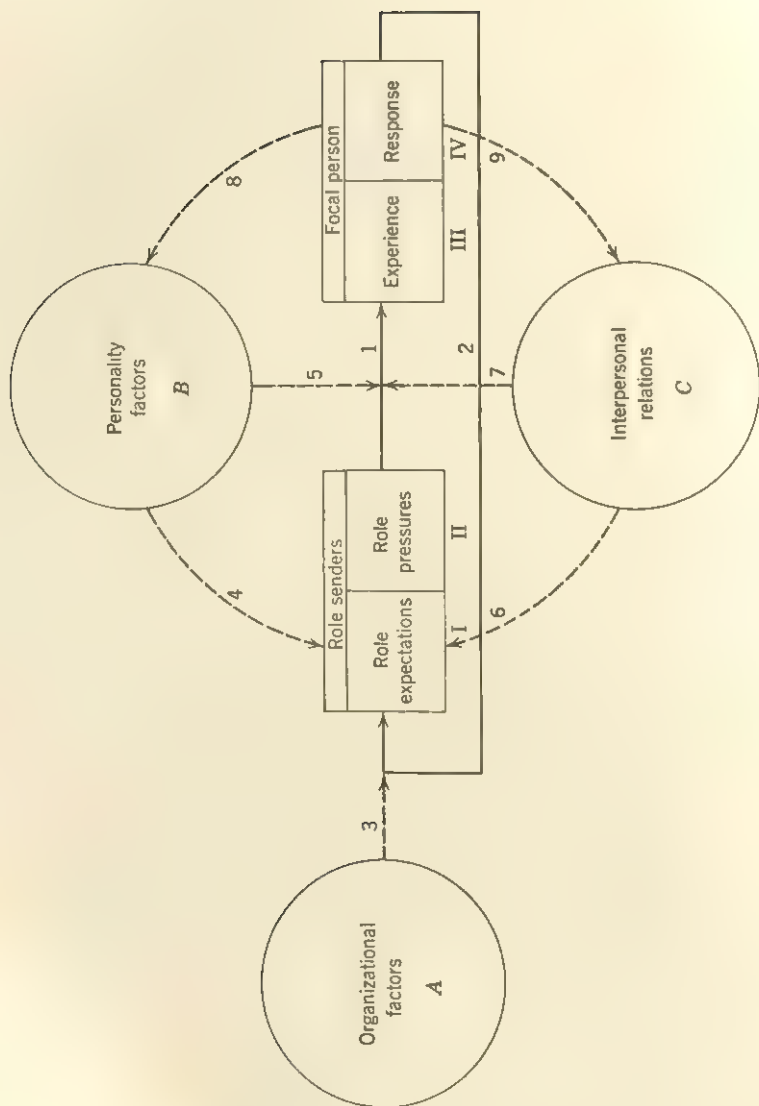


Figure 19-1. A theoretical model of factors involved in adjustment to role conflict and ambiguity.

response on the part of the person who is the target of these influence attempts (communicated expectations). His response, and especially the degree of compliance which it signifies, is observed by the members of his role set, who decide in turn how to respond, and thus another cycle begins. The schema is equally appropriate for illustrating ongoing stable states (for example, states of clarity or ambiguity, conflict or harmony) which characterize a series of such cycles over some stated period of time.

In addition to these categories of variables, which include the main causal sequences about which we have formulated hypotheses, we are interested in three additional classes of variables that refine and extend our basic hypotheses about role conflict and ambiguity. One is the class of organizational variables, which can be thought of as the breeding ground for role expectations. Another is the category of personality variables, which we think of as modifying and extending the basic relationships in several ways: by mediating the perception of conflict and ambiguity, by mediating the effects and responses of a person to conflict and ambiguity, and by influencing directly the perceptions and therefore the actions of one's co-workers. The third class of variables by which we extend our basic findings is made up of interpersonal dimensions, and these enter into our theoretical schema in much the same way as personality factors: as potential mediators of the relationship between objective and experienced conditions, as mediators of the relationship between experienced conditions and the responses which they evoke, as affecting the perceptions and behaviors of others toward the focal person, and as being affected themselves by his responses.

The model was illustrated in Fig. 2-2. That figure is reproduced here as Fig. 19-1; let us consider the research findings in the several classes of relationships illustrated by it.

The Immediate Effects of Conflict and Ambiguity

(a) Role conflict. The experience of role conflict is common indeed in the work situation. Almost half of our respondents reported being caught "in the middle" between two conflicting persons or factions. These conflicts are usually hierarchical; 88 per cent of the people involved in them report at least one party to the conflict as being above them in the organization. Somewhat less than half report that one of the conflicting parties is outside the organization. One of the dominant forms of role conflict is overload, which can be thought of as

a conflict among legitimate tasks or a problem in the setting of priorities; almost half of all respondents reported this problem.

The intensive study, in which role senders and focal persons were interviewed independently, deals more directly with the causal sequences initiated by conditions of conflict. Measures of objective conflict, as derived from the expectations of individual role senders, are positively associated with the subjective experience of conflict, as reported by the focal person who is the target of incompatible expectations. These, in turn, are linked to affective and behavioral responses of that person.

The emotional costs of role conflict for the focal person include low job satisfaction, low confidence in the organization, and a high degree of job-related tension. A very frequent behavioral response to role conflict is withdrawal or avoidance of those who are seen as creating the conflict. Symptomatic of this is the attempt of the conflicted person to reduce communication with his co-workers and to assert (sometimes unrealistically) that they lack power over him. Case material indicates that such withdrawal, while a mechanism of defense, is not a mechanism of solution. It appears to reduce the possibility of subsequent collaborative solutions to role conflict.

(b) Role ambiguity. The prevalence of role ambiguity is comparable to that of role conflict. Four specific subjects of ambiguity are cited as disturbing and troublesome in approximately equal numbers by respondents. These include uncertainty about the way in which one's supervisor evaluates one's work, about opportunities for advancement, about scope of responsibility, and about the expectations of others regarding one's performance. Each of these areas of ambiguity was mentioned by approximately one third of the respondents. In all, about two persons out of five considered that they were given insufficient information to perform their jobs adequately.

Among the major sources of role ambiguity about which we speculated were complexity of task and technology, rapidity of organizational change, interconnectedness of organizational positions, and that managerial philosophy which advocates restriction of information on the assumption that the division of labor makes broad information unnecessary for most positions.

The individual consequences of ambiguity are in general comparable to the individual effects of role conflict. These include, for ambiguity: low job satisfaction, low self-confidence, a high sense of futility, and a high score on the tension index. There is evidence, however, that the response of the person to ambiguity is selective. For example, ambi-

guity regarding the evaluations of others does not decrease the intrinsic satisfaction of the employee with the job, although it does decrease his self-confidence and weaken his positive affect for co-workers.

Organizational Determinants of Conflict and Ambiguity

The major organizational determinants of conflict and ambiguity include three kinds of role requirements: the requirement for crossing organizational boundaries, the requirement for producing innovative solutions to nonroutine problems, and the requirement for being responsible for the work of others (arrow 3).

Let us consider first the requirement for crossing a company boundary. Both the frequency and the importance of making contacts outside one's company are associated with the experience of role conflict. Crossing the company boundary is associated also with experienced tension, but the relationship is curvilinear; greatest tension is experienced by those who have discontinuous contacts outside the organization. We propose the hypothesis that in positions which require extracompany contacts on a continuous basis, there are special facilities or some other organizational acknowledgment of boundary difficulties which renders them less painful.

Hypothetical explanations for the stressfulness of boundary crossing are available primarily from case materials. It appears that the person who must frequently deal with people outside the company usually has limited control over these outsiders. He cannot strongly influence their demands and the resources which they supply to him. Moreover, a person in a boundary position is likely to be blamed by people in his own company for what his outside contacts do or fail to do. They in turn may blame him for shortcomings in his own company. The difficulties of living at the boundary of an organization are intensified when the boundary dweller must coordinate his extraorganizational activities with people in other departments within the company.

In general, living near a departmental or other intraorganizational boundary has effects very like those just remarked for boundaries of the organization itself. Nearness to a departmental boundary and frequency of dealing across such boundaries are associated with felt conflict and with experienced tension.

Roles which demand innovative problem solving are associated with high role conflict and with tension. The occupants of such roles appear to become engaged in conflict primarily with the organizational

old guard—men of greater age and power, who want to maintain the status quo. Among the major role conflicts which persons in innovative jobs complain of is the conflict of priority between the non-routine activities which are at the core of the creative job and the routine activities of administration or paper work. These latter, according to the people who fill innovative positions, are unduly time consuming, disrupt the continuity of their creative work, and are generally unpalatable.

There is considerable evidence that organizations exercise selective effort in choosing people for innovative positions. People in such positions tend to be characterized by high self-confidence, high mobility aspirations, high job involvement, and a tendency to rate the importance of a job extremely high compared to the importance of other areas of their lives.

Supervisory responsibility emerges as a major organizational determinant of role conflict. Either the supervision of rank and file employees or the supervision of people who are themselves supervisors appears to have substantial effects on the degree of role conflict and the amount of experienced tension. In combination direct and indirect supervisory responsibility produce very substantial role conflict and tension.

There is a systematic relationship also between rank and role conflict, as there is between rank and tension. The often heard assertion that the lowest levels of supervision are subjected to the greatest conflict is not borne out by these data. Rather, there is a curvilinear relationship in which the maximum of conflict occurs at what might be called the upper middle levels of management. We interpret this in part as a consequence of the still unfulfilled mobility aspirations of middle management, in contrast to the better actualized aspirations of top management people.

The Significance of Interpersonal Relations

The sources of pressure and conflict for a person can be expressed rather fully in terms of his interpersonal relations with these pressure sources (arrow 6). The greatest pressure is directed to a person from other people who are in the same department as he is, who are his superiors in the hierarchy, and who are sufficiently dependent on his performance to care about his adequacy without being so completely dependent as to be inhibited in making their demands known. The

people who are least likely to apply such pressures are a person's peers and role senders outside his own department.

The kinds of influence techniques which people are prepared to apply, as well as the degree of pressure they exert, vary with their formal relationship to the potential target of their pressures. To a considerable degree the actual power structure of organizations follows the lines of formal authority. Legitimate power, rewards, and coercive power over an organizational member are largely in the hands of his direct organizational superiors. Although a supervisor has coercive power available to him as a basis for influencing his subordinates, he is likely to refrain from using it where it might impede the performance of these subordinates and perhaps reflect upon the supervisor himself. On the other hand, the techniques used by subordinates to apply coercive power are precisely those which threaten the efficiency of the organization. They include the withholding of aid and information.

The deleterious effects of role conflict are most severe where the network of an individual's organizational relations binds him closely to members of his role set (arrow 7). When a person must deal with others who are highly dependent on him, who have high power over him, and who exert high pressure on him, his response is typically one of apathy and withdrawal—psychological if not behavioral. Under such circumstances the experience of role conflict is intense and job satisfaction correspondingly low. Emotionally, the focal person experiences a sense of futility, and he attempts a hopeless withdrawal from his co-workers. Likewise, the costs of role conflict upon the focal person are most dear where there is a generally high level of communication between the focal person and his role senders.

Since close ties to role senders with regard to functional dependence, power, and communication intensify the effects of an existing conflict, an obvious means of coping with conflict is to sever ties with one's role senders. Symptomatic of this pattern of withdrawal in the face of conflict is the tendency of an individual experiencing role conflict to reduce the amount of communication with his role senders, to derogate the power these senders have over him, and to weaken his affective bonds with these senders (arrow 9). Although this pattern of coping with stress is common, its logic is questionable. Withdrawal may be successful in alleviating the effects of stress for a time; in the longer run it is likely to prove self-defeating. Withdrawal may not only leave the initial conflict unresolved, but may in addition set off a chain reaction of derivative conflicts.

The Significance of Personality Variables

Several personality dimensions mediate significantly the degree to which a given intensity of objective conflict is experienced as strain by the focal person (arrow 5). These personality dimensions include emotional sensitivity, introversion-extroversion, flexibility-rigidity, and needs for career achievement. For example, the effects of objective role conflict on interpersonal bonds and on tension are more pronounced for introverts. The introverts develop social relations which, while sometimes congenial and trusting, are easily undermined by conditions of stress. The preference of such people for autonomy becomes manifest primarily when social contacts are stressful, that is, when others are exerting strong pressures and thereby creating conflict for them. In similar fashion, emotional sensitivity mediates the relationship between objective conflict and tension, with emotionally sensitive persons showing substantially higher tension scores for any given degree of objective conflict. An individual who is strongly achievement oriented exhibits a high degree of personal involvement with his job, and the adverse effects of role conflict are more pronounced for him than for those who are less involved.

There is also a tendency for people of different personality characteristics to be exposed by their role senders to differing degrees of objective conflict (arrow 4). Thus people who are relatively flexible are subjected to stronger pressures than those who have already demonstrated by their rigidity the futility of applying such pressures. Likewise, one who is highly achievement oriented, particularly where such orientation takes on a neurotic cast, is more likely than others to alienate his role senders and to evoke from these role senders increased pressures to change his personal style of behavior.

The Identification of Coping Responses

How, then, do individuals confronted by a stressful situation attempt to cope with this situation? Our theoretical model of reactions to role stress should indicate that this question so phrased cannot be answered. This model suggests that no coping response to organizational stress can be fully understood without considering the type of stress involved, the organizational conditions creating the stress, the personality of the individual experiencing the stress, and the network

of interpersonal relations binding the individual to his role senders. But even a specification of all such variables gives an incomplete picture of a particular stressful episode, since such an episode may take place against a backdrop of many other stressful episodes both past and present. A penetrating study of coping responses in stressful situations cannot therefore be a study of neat, self-contained episodes and one-to-one relationships. If at times in the preceding chapters we have postulated such relationships, we have done so in full realization that we were thereby oversimplifying an exquisitely complex problem. We attempted to emphasize this complexity in Chapter 18, in which our analyses of coping behavior took the form of six detailed case studies. The importance of these case analyses lies partly in their integration of the findings of earlier chapters and partly in what they may suggest in the way of specific hypotheses for future studies of coping behavior; their primary importance, however, stems from the general guidelines they set for such research. We feel that analyses of coping responses to a stress episode—be this episode one of conflict, ambiguity, or some other stress—should be guided by the following considerations:

1. The study of coping behavior should include failures as well as coping mechanisms which are successful. The concept of coping is defined by the behaviors subsumed under it, not by the success of these behaviors. It may even prove profitable to concentrate upon those behaviors which are intended to cope with stress but which fail to do so. The psychoanalytic study of defense mechanisms would have been seriously retarded had it confined itself to the observation of conspicuously successful defenses. It is often in situations of failure where the ramifications of a particular coping mechanism or defense can be seen most vividly.

2. The analysis of a stressful role episode should distinguish between core problems (the initial stress which persists either manifestly or latently) and derivative problems (those problems created by an individual's attempts to cope with the core problem). Our case analyses indicate that individuals with similar core problems may currently be experiencing stress because of quite dissimilar derivative problems, and that individuals whose observable derivative problems are dissimilar may be coping with similar core problems.

3. The success of coping behavior should be evaluated with reference to a designated time period. An individual may be confronted with a job-related problem this morning and completely avoid the problem this afternoon. He may go home unconcerned this evening only to return to find the problem intensified tomorrow. Our data indicate that one who is faced with conflict or ambiguity often tries

to withdraw from his various attachments to his role senders. Although such a detachment may temporarily alleviate problems of conflict or ambiguity, are such problems thereby resolved? Does restriction of communication with role senders help alter their incompatible or overdemanding role expectations and thereby resolve role conflict? Can such restriction of communication with role senders eliminate role ambiguity, which itself seems to be a problem of inadequate communication?

4. The cost of a coping maneuver should be reckoned with reference to all affected systems. The designation of coping behavior as successful or unsuccessful has little meaning unless one asks "successful for whom?" This designation is particularly critical in studies of coping behavior in organizations, for what is good for an individual is not necessarily good for his role set. And what is good for the individual and his role set need not be consonant with the goals of the organizational system. Our case analyses of coping behavior suggest that those who pay the piper are not always those who have called his tune.

Implications for Human Organization

The research on which this book is based is in part descriptive, attempting to set out something of the prevalence and distribution of two common conditions of organizational life: role conflict and role ambiguity. Our major emphasis, however, has been on explanation—on showing the organizational origins, the immediate causes, and some of the consequences of these two conditions. The practitioner who reads these pages will do so with still a third consideration dominant in his mind: what can be done to reduce the incidence of role conflict and ambiguity, and to make the effects of these conditions (when they cannot be avoided) minimally damaging to the person and to the organization?

We address ourselves gladly to these questions, partly out of a sense of just obligation to the practitioner and partly because we are not neutral with respect to the issues they raise. We can imagine organizations more sensitive to human needs and more nurturant of human potentialities, and we are interested in contributing to the development of such organizations.

Let us begin by acknowledging a degree of inevitability in the occurrence of role conflict and ambiguity in complex organizations. Human behavior in organizations is patterned, influenced by organi-

zational circumstances; it is, in short, behavior which would not otherwise have occurred. This very definition implies that some forces are being overcome in order to produce the required behavior. These may be forces generated by enduring properties of the individual himself, or they may stem from various external sources. In either case, they imply conflict, at least in the limited sense of relinquishing alternatives. The individual foregoes something for the sake of performing the organizational role.

Some measure of ambiguity is no less inevitable in organizations. To attempt the creation of a complete organizational blueprint, in which every task would be specified, every method prescribed, and every contingency foreseen would be a self-defeating effort. It would be impossibly costly; it would be constantly upset by changes in the organizational environment. Moreover, it would be most unwelcome; to work under conditions of absolute and unrelieved specificity does not suit the human organism.

The issue, then, is not the elimination of conflict and ambiguity from organizational life; it is the containment of these conditions at levels and in forms which are at least humane, tolerable, and low in cost, and which at best might be positive in contribution to individual and organization. The present research implies four ways in which this goal might be approached: by introducing direct structural changes into organizations, by introducing new criteria of selection and placement, by increasing the tolerance and coping abilities of individuals, and by strengthening the interpersonal bonds among organizational members. The research suggests also that all four of these approaches will be facilitated by a substantial revision of conventional views of organizational structure and by the direct utilization of the role set in bringing about organizational change.

A New View of the Organization

We would urge that an organizational leader bent on reducing conflict and ambiguity to optimal levels begin by asking himself some old questions about organization and refusing to be content with the old answers. What is an organization? Wherein lies organizational structure? Our research argues that the answers to these questions should not be given merely in terms of buildings and equipment; they are empty and inanimate; they may remain after the business fails or the organization dissolves. Nor is it satisfactory to define the organization by naming its officers or enumerating its membership; they change or leave the organization entirely, and yet it persists and is

recognizable as somehow the same organization. Deprived of these conventional means of identification, the company president or union leader might next point to the organization chart as the defining document. In so doing he might come close to reality or not, depending on the accuracy of the chart; he would at best, however, be pointing to a representation of the organization rather than to the thing itself. At worst, he would be designating a nonrepresentation of the organization, a piece of abstract art which can claim neither fidelity to life nor insight-giving distortions of it. We have proposed a different definition: The organization is an open system, a system of roles; it consists of continuing, interdependent cycles of behavior, related in terms of their contribution to a joint product.

What does this definition imply for conventional ways of looking at and representing organizations? It implies immediately that the organization chart is inadequate; such charts show the lines of authority from supervisors to subordinates; all other bonds, all other forms of interdependency are neglected. More recently, Likert (1961) has proposed a revision of the typical organization chart and the style of administration which it allegedly reflects. Likert's theory and representation of organizational structure emphasizes the group (the supervisor and his immediate subordinates)—rather than the dyad (supervisor and each subordinate taken one at a time). This is an important revision, because it adds two ideas to conventional representations of organization: interdependence among subordinates who report to the same supervisor, and the interlocking of such groups throughout the organization, by means of the "linking-pin" functions of formal supervisors.

The implications of our research suggest a further revision. If the organization is a network of interrelated roles (or, more precisely, of role behaviors), it follows that the bonds which connect one role to another may be of many kinds, not of formal authority alone. Two roles may be related in terms of authority, to be sure, but they may also be related because of the sequence of work flow, or of information, or because of the liking which one person has for another, or because of expertise. All these bonds have in common the properties of expectation and influence; they imply that the occupant of one role is concerned with the behavior of another, is in some fashion dependent on that behavior, has ideas about what constitutes acceptable performance in terms of his own needs, and acts to influence the other person toward such performance. The organization is a complex network of roles connected by such bonds of expectation and influence, some of them reciprocal, some asymmetrical. Thus, no role in an or-

ganization is intact or fully separable from others. Each is defined in terms of expectations which stem from others, and in terms of behaviors which relate to the behavior of others.

We may wish to deal with a single role, and for that purpose we figuratively pluck it out of the network of other roles to which it is connected. When we do so, we find that what we have in hand is an assortment of duties and obligations, expectations and rights which state relationships between this role and various others. These relational statements dangle from the role like strands from a knot which has been cut out of a larger net of which it was a part. And if we try to eliminate those bonds and define the role without mentioning its connections to any other, we make a startling discovery: there is virtually nothing left. The role is defined in terms of its relationships to others, just as the knot in a net is no more than the intersection of bonds and disappears if we try to trim too closely.

The implications of this view of organization are not only distant and theoretical; they are immediate and practical:

1. To understand and predict a man's behavior on the job, we must ask to what other jobs his is connected (to what other persons he is connected) and what is the nature of the connecting bonds (formal authority, personal liking, task interdependence, and the like).
2. To change the behavior of an individual or the content of a job involves complementary change on the part of all the "bondholders," the people to whom he is directly connected in the organization and who constitute his role set (Chapter 2). Unless such complementary changes are carried through, there will be conditions of conflict or of ambiguity between the individual and the members of his role set.
3. It follows that management should recognize the individual and the role set as the basic unit of which organizations are constructed. This is the minimum relevant group for decision making involving changes in the duties of any position in the organization. It follows also that each member of an organization should have the legitimate authority to convene the members of his role set to reach understanding and agreement regarding his duties (their role expectations of him) and his performance on the job (his role behavior). In doing these things, management would recognize formally the importance of the role set, and acknowledge the organization as made up of an array of such sets, one associated with each position in the organization, each set typically overlapping several others. In Fig. 19-2 three views of organizational structure are contrasted—conventional management theory, the Likert revision as proposed in *New Patterns of Management* (1961), and the present version of role theory.

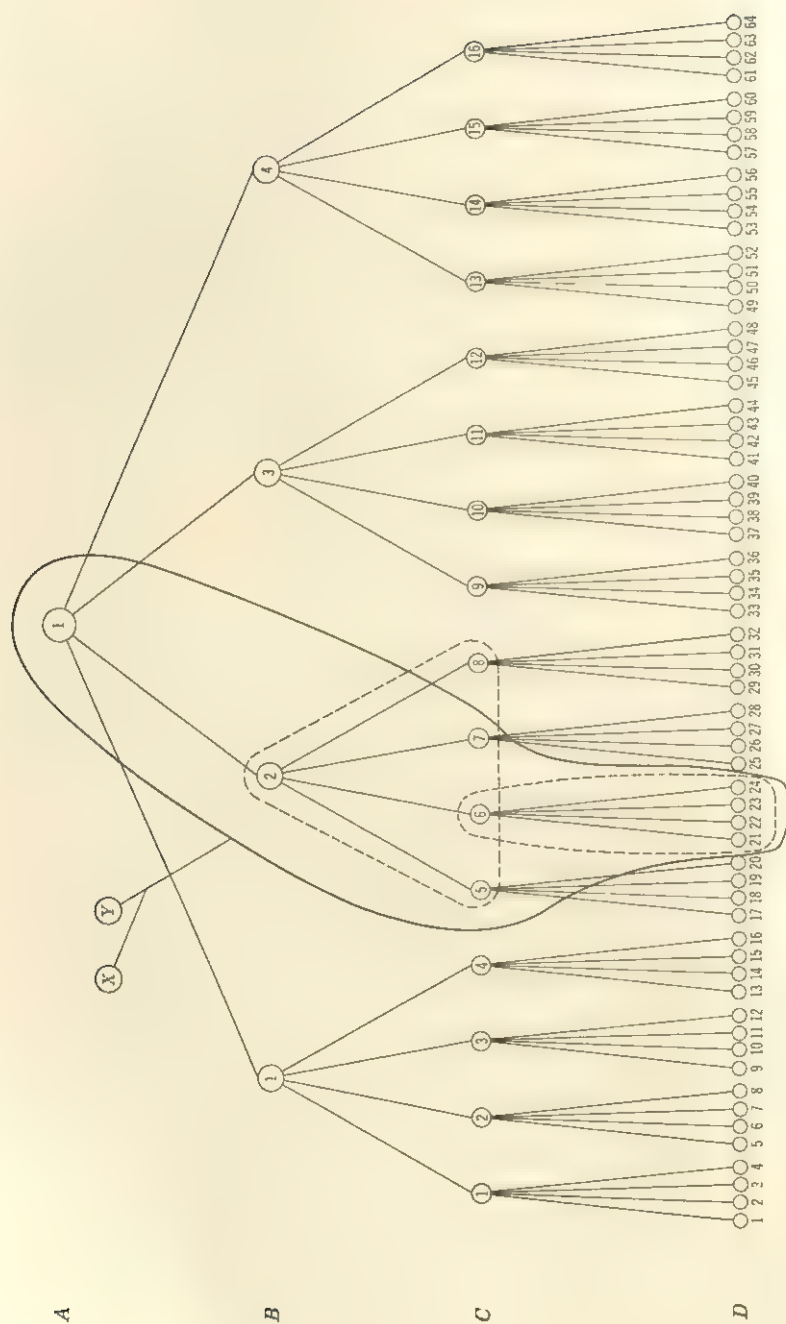


Figure 19-2. Three views of organizational structure.

In this figure two revised views of organizational structure have been superimposed on a conventional organizational chart: the overlapping groups of the Likert theory are shown by dotted lines; the role set for position C-6 is enclosed with a heavy solid line. To make clear the different implications of these several views, let us assume that an issue has arisen which involves the performance and task requirements for position C-6, one of sixteen jobs at the first level of supervision in the organization. Conventional approaches to management would regard this issue as a matter to be settled between the immediate supervisor and the subordinate whose job is at issue—that is, between B-2 and C-6. The theory of overlapping group structure (Likert, 1961) would see the issue as appropriately settled within two “organizational families,” primarily within the group consisting of supervisor B-2 and subordinates C-5, 6, 7, and 8; secondarily between C-6 and his own immediate subordinates, D-21, 22, 23, and 24.

To approach the same problem in terms of the role set, we would begin by identifying the role set for position C-6. To do this precisely would require us to determine those other positions in the organization to which C-6 is directly linked; that is, positions whose occupants have specific expectations regarding what the occupant of C-6 shall and shall not do, and who communicate these expectations in some fashion to him. The role set as drawn in Fig. 19-2 is typical, however; it includes for position C-6 the immediate superior (B-2), the superior once removed (A-1), those peers who are adjacent in the workflow system (C-5 and C-7), all immediate subordinates (D-21, 22, 23, 24), and two persons whose importance for C-6 is determined by personal bonds rather than the formal facts of authority or flow of work (X and Y).

There is no implication that this set of people ought be convened to consider all problems relating to position C-6. Such a procedure would be costly, frequently unnecessary, and sometimes ridiculous. We do argue that the behavior of C-6 is of direct concern to the others in his role set and is substantially determined by their behavior toward him, that any change in his behavior will require some complementary changes on their part, and that the success of such a proposed change in the behavior of C-6 will depend in large part upon their acceptance and reinforcement of it. It follows that the expectations of these role senders ought be taken into account in any process of evaluating and attempting to change the behavior of C-6. Whether a meeting of the entire set, consultation with subsets, or mere information will suffice depends upon the significance of the proposed action for their own needs and behavior.

Stress and Structure

Another broad implication of the present research has to do with the importance of organizational structure, the formalities and architecture of organization. It is perhaps unnecessary to remind most leaders of organizations that structure is important; they tend to be aware of the fact. Nevertheless, the human relations emphasis of the past twenty years, in the hands of some of its enthusiasts, has de-emphasized questions of formal structure. The very term human relations suggests that the causes of organizational health or illness will be sought in the area of personal and interpersonal style. Our research concurs in the importance of personality and interpersonal relations, but in a context which begins with the structural facts of organization.

It is not easy, however, to extrapolate from the research findings on organizational structure to specific organizational advice. For example, we have found that liaison positions, rank, supervisory responsibility, innovative roles, and functional interdependence are significant sources of stress in organizations. Shall we then eliminate them, and construct an organization which is unconnected and therefore unresponsive to the outside world, which is without supervisory responsibilities and therefore without supervision, without innovative roles and therefore perhaps lacking in innovation, without functional interdependence and therefore no organization at all? Obviously not; we must attempt to construct human organizations which incorporate optimal compromise solutions to certain persisting organizational dilemmas.

One such dilemma is the balance between stress and performance. Although measures of organizational performance were not available in the present research, it is clear that the direct elimination of some sources of stress would be possible but that the effects on performance might be serious.

Another is the dilemma of containment versus allocation of stress. In every organization some compromise must be reached between sharing out stressful attributes with absolute equality among all positions and concentrating the stressful requirements in a single, heroic task. Moreover, solutions which favor either alternative carry with them their own derivative problems. Concentrating the functions of organizational liaison on a very few positions, for example, risks much in a few hands, forces a search for champions to fill the crucial positions, and is likely to create intraorganizational stresses as different

parts of the organizations struggle to insure that their interests will be well-represented by the overworked representative.

A third persisting dilemma in moving from research findings to specific recommendations about structure involves the choice between stress and stress. The elimination of a source of stress often brings side effects in the form of new and still stressful imbalances. For example, innovative roles have been found to be stressful, but it does not follow that a highly creative person will be happier and healthier if he is assigned to more routine tasks. The lack of self-actualization in such a role might subject such a person to greater strain than he experienced as an innovator, fighting the battles of innovation against the old guard.

With these dilemmas before us, reminding us of the tentative quality of our recommendations, we offer the following proposals as worth consideration by those architects of organizations who wish to create less stressful structure:

With respect to the liaison of the organization with the outside world, create specialized positions for which liaison is the major and continuing function. Provide strong support for such positions, in terms of power, ancillary services, and organizational recognition. Establish multiple rather than single liaison arrangements whenever the work load justifies; all truth is seldom contained in one channel. Build into the organization formal procedures for maintaining agreement and understanding between the boundary dwellers and those who are oriented inward.

This latter suggestion will require the creation of opportunities and indeed responsibilities for each person in a boundary position to see first hand the problems and circumstances of those whom he represents, to learn the ways in which his liaison activities affect them. It is no less important, of course, to provide for the occasional exposure of people deep within the organization to the forces encountered daily by the liaison person.

The means for doing these things are not mysterious, given acceptance of the principle. They include the rotation of persons from boundary to inside positions, such as brief tours of duty of salesmen in manufacturing, for example, or line supervisors into personnel or labor relations. In some situations it may be feasible and valuable to arrange meetings at which outsiders are imported expressly for the purpose of communicating directly the needs and preferences which ordinarily reach the organization only through the liaison person.

A second proposal for minimizing stress in the structural design of organizations has to do with size, shape, and requirements for coordina-

tion among positions and subunits of the organization. Americans are accustomed to thinking of growth as synonymous with organizational life, and of large size as a condition for maximum efficiency. Against these assertions must be placed the finding that stress and organizational size are substantially related. The curve of stress begins to rise as we turn from tiny organizations to those of 50 or 100 persons, and the rising curve continues until we encounter the organizational giants. Only for organizations of more than 5000 persons does the curve of stress level off—perhaps because an organization so large represents some kind of psychological infinity and further increases are unfelt.

We interpret this finding as urging changes in structure, however, rather than gross changes in size; the economic consequences of shrinking down to stress-free organizations of a dozen or so members would be tragic. The stressfulness of size, we believe, stems in considerable part from increased requirements for coordination. All coordination involves costs; to require that even two persons somehow synchronize their activities takes time, effort, and some psychological costs of accommodation. Moreover, each additional person who is introduced into such an interdependent set adds disproportionately to the total number of coordinative bonds. To be precise, each new person with whom the others must coordinate adds $(N - 1)$ to the total number of bonds. Thus, for two persons, there is only one bond; for three persons, three bonds; four persons, six bonds; five persons, ten bonds; and so on up the curve of strain and confusion.

The implications for builders and leaders of organizations can be summed up in these terms: Minimize the requirements for coordination between positions and groups; in other words, treat every coordinative requirement as a cost, which it is. For each functional unit of the organization, ask how independent it can be of others and of top management. For each position, ask how autonomous it can be made, what is the minimum number of other positions with which it must be connected, and for what activities and purposes the connections are essential. For each coordinative bond which must be established between positions and units, seek the minimum number of activities which must be coordinated in order to avoid undue organizational risks. The basic justification for coordination becomes functional interdependence, the requirement which stems directly from the productive process. Examples would include the feeder lines which support the assembly line, or the use of a common unique facility like a computer installation by several producing units. The safety of the total system would of course constitute another undeniable basis for coordination; no one proposes that the final inspection unit in aircraft

maintenance should be uncoordinated with other units, including the mechanics and pilots.

The advocacy of minimal coordination contrasts sharply with the notions of centralized leadership, with the idea that ultimate and maximum control must originate from a central source and maximum information return to that source. Coordination only when justified by functional requirements or systemic risk also points up a common fault of management, a preoccupation with organizational symmetry and aesthetics, and an emphasis on the regularities and beauties of the organizational chart. The organization which follows this principle of coordinative economy would not necessarily be small, but it would not have grown haphazardly and it would not regard size as an unmixed blessing. It would be decentralized, flat and lean, a federated rather than a lofty hierarchical structure.

Advice to reduce the coordinative requirements of organization is unlikely to arouse much managerial enthusiasm, especially among those who see only the alternatives of close coordination by authority and absolute anarchic diversity. There are, however, other means than authority for infusing order into organizational life and insuring behavior in the service of organizational objectives. One vital means, often neglected and still more often misused, is the reward structure of the organization. Deutsch (1960) distinguishes between two kinds of interdependence—promotive and contrient. Two persons or groups are promotively interdependent when the success of one facilitates the success of the other. The members of a football team, for example, are promotively interdependent; the joys and rewards of victory (individual records aside for the moment) can come only through collaborative effort and exist for all members of the team or for none. On the other hand, opponents in a boxing match are contriently interdependent; there can be a match only if they collaborate to make one, but either of them can win only if the other loses.

The principle of promotive interdependence exemplified in the reward structure of an organization would require that rewards to individual members would be maximized under the same conditions, that is, when the attainment of organizational objectives was maximized. To the extent that coordination of effort would contribute to those objectives, the extrinsic rewards of the organization at least would be utilized to motivate such coordination. Workers under an individual incentive plan must sometimes be ordered into coordination; salesmen on commission must sometimes be ordered out of intramural competition. In these instances management tries to achieve by fiat a necessary collaboration which is explicitly discouraged by the em-

phasis of the reward system on individual achievement only. Far more appropriate would be the gearing of rewards to the success of those forms of collaboration which maximize the attainment of organizational objectives. The Scanlon Plan (McGregor, 1960; Lesieur, 1958; Krulee, 1955) is perhaps the best example available to American industry of the use of a reward system which creates promotive interdependence among factory workers. The significance of the example for our present discussion of coordination is that the Scanlon Plan has achieved in a number of companies a degree of collaboration and mutual assistance in the service of organizational objectives which authoritative demands for diligence and coordination had not been able to attain. Such a use of extrinsic rewards can strengthen greatly the relatively autonomous structure of organization which we advocate.

Organizational Change

The last of the aspects of organizational life about which we will hazard advice is the accomplishment of change. The leadership of any organization is forever engaged in efforts to promote some kinds of change and prevent others. The tools of change are many, including exhortation, publication, training programs, and demonstrations. Orders and memoranda without number daily demand or implore change, yet every manager knows how partial and infrequent are his successes in creating change. We propose that these difficulties are due in part to the persistent utilization of the wrong unit for achieving change; the concentration has been on the individual when it should be on the role set—focal person and role senders.

To produce a change in the way in which Person A performs his role, there must be an acknowledgment of the change by the members of his role set; more, they must themselves change in complementary fashion. If he attempts to change and they refuse to do so, Person A is in a state of imbalance or conflict; he no longer conforms to the expectations of his role set. We can predict that he will experience the role conflict as unpleasant, and that he will do various things to reduce or avoid it. In the circumstances of this example, his most obvious and most likely course of action is to revert to his earlier pattern of performance, assuming that it gave reasonable satisfaction to the members of his role set. And when he has so reverted, the man who gave the lecture, wrote the memorandum, or conducted the training program says sorrowfully that "you can't change Mr. A."

To remove a person from his role set, tell him in a training program or executive interview that he should change his behavior, and then

return him to the unchanged set burdens him with a double responsibility. He must not only change his own behavior; he must effect complementary changes in the expectations and behavior of his role senders. This is the characteristic and crucial weakness shared by conventional programs of training, communications, and executive exhortation.

Yet the evidence in favor of using the natural group to carry through such behavioral changes is great, and continues to grow. The well-known industrial experiment of Coch and French (1948) in overcoming resistance to change can be interpreted as demonstrating the potency of the role set, and so in part can the work of Mann and his colleagues (1957) in introducing research data into organizational families of supervisor and immediate subordinates at successive echelons of an organization. The power of "laboratory" or "T-group" training (Bradford et al., 1964) also illustrates the importance of the role set in achieving change, since the purposeful isolation of the T-group creates a situation in which for a time each member has for his role senders only other members of the group. It is in keeping with this interpretation that current extensions of the T-group technique emphasize the use of "natural groups" (organizational role sets and parts of role sets) as appropriate units for training.

New trends in therapy also show a turning away from the classic solitude of patient and analyst, in favor of utilizing the family as the unit within which the health of the patient is determined (Ackerman, 1958). We urge acceptance of the role set by leaders of organization as the key unit for the achievement of change. The role set is not neutral to attempts at changing the behavior of an individual; it characteristically opposes or reinforces those efforts. Its proper utilization in the change process can not only increase the probability that real change will be achieved; it can also make the process relatively conflict-free, and bring the organization closer to meeting that relentless demand on all open systems: to change appropriately in response to environmental demands for change.

We have interpreted our research data on organizational stress as urging on practitioners of organization the importance of the key concept which has informed the research: the idea of the focal person and role set. We have argued that from this idea stems a new view of the organization, a fuller appreciation of organizational structure, and a more powerful approach to creating individual and organizational change. In urging our views on practitioners with such seeming confidence, we are nevertheless painfully aware that knowledge of human organizations is still fragmentary. That knowledge can best be advanced by research which attempts to deal simultaneously with data

at different levels of abstraction—individual, group, and organization. This is a difficult task, and the outcome is not uniformly satisfactory. It is, nevertheless, a core requirement for understanding human organizations. Organizations are reducible to individual human acts; yet they are lawful and in part understandable only at the level of collective behavior. This duality of level, which is the essence of human organization as it is of social psychology, we have attempted to recognize in our theoretical model and in our research design. Our hope is that the effort and its product may contribute to the understanding of organized human behavior. We know of no more urgent problem.

APPENDIXES

A

Comparison of National Survey Sample with U.S. Census Figures

<i>Age</i>	<i>U.S. Census, March 1961¹</i>		<i>National Sample, 1961</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
14-19	6.8%	9.2%	7.3%	14.4%
20-24	10.2	11.2		
25-44	45.1	40.0	51.8	48.4
45-64	32.9	35.4	36.7	33.9
65+	4.7	3.9	3.9	3.1
<i>Occupation</i>				
Professional, technical	12.2%		13.2%	
Farmers	4.2		5.2	
Managers, officials, proprietors	11.1		15.2	
Clerical, sales	21.9		19.8	
Craftsmen, foremen	12.4		13.1	
Operatives	17.2		16.9	
Unskilled laborers, service workers	20.6		13.8	
Other			2.3	
<i>Class of worker</i>				
Wage and salary	85.4%		82.6%	
Self-employed	14.6		17.4	
<i>Education²</i>				
Grade school	28.9%		23.5%	
Some high school	20.2		17.4	
Completed high school	31.7		30.1	
Some college	9.4		14.2	
Completed college	9.7		13.8	
<i>Sex</i>				
Male	64.7%		70.5%	
Female	35.3		29.5	

¹ March, 1961, Table 287: 14 years and up, working any number of hours.

² March, 1959, Table 141: labor force 18-64.

B

Correlates of Demographic Variables in the National Survey

The following sets of tables have as their dependent variables several of the job adjustment measures employed in the national survey. The control variables are demographic ones: sex, type of employment, age, education.

The first set of tables control on sex and type of employment (wage-and-salary versus self-employed). The remaining two sets of tables institute tertiary controls on age and education, respectively, for all groups other than the self-employed females, since the size of the latter group in the national sample was too small to permit such tertiary controls.

Entries in the body of all the tables are based upon weighted data (see Chapter 4).

The national survey items on which the data are based are given in full in Appendix R. Items on which the dependent variables are based are as follows.

1. Percentage of Respondents Reporting Themselves in Less than "Excellent" Health: Question 48.
2. Percentage of Respondents Reporting Themselves as Having Been Absent from Their Jobs for at Least One Day During the Previous Year: Question 49.
3. Percentage of Respondents Reporting Themselves Less than Satisfied with Their Present Jobs: Question 51.
4. Percentage of Respondents Reporting Their Job Satisfaction Level as Having Altered Since Beginning Present Jobs: Question 50.
5. Percentage of Respondents Reporting Their Job Satisfaction Level as Having Decreased Since Beginning Present Jobs: Question 50.
6. Mean Tension: Tension Index, see Appendix I.
7. Percentage of Respondents Reporting Some Job-related Worries in Open-ended Questions: any reported worries in Response to Question 47.
8. Percentage of Respondents Reporting Being "In Middle": answers indicating a frequency greater than "Never" in response to Question 46.

Class of Worker and Sex

Percentage of Respondents Reporting Themselves in Less than "Excellent" Health

	<i>Males</i>		<i>Females</i>		<i>Total Per Cent</i>
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	
Wage-and-salary	26	(720)	28	(353)	26
Self-employed	25	(193)	18	(33)	24
Total	26		27		26

Percentage of Respondents Reporting Themselves as Having Been Absent from Their Jobs for at Least One Day During Previous Year

	<i>Males</i>		<i>Females</i>		<i>Total Per Cent</i>
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	
Wage-and-salary	55	(720)	63	(349)	58
Self-employed	31	(185)	64	(31)	36
Total	50		63		54

Percentage of Respondents Reporting Themselves Less than Satisfied with Their Present Jobs

	<i>Males</i>		<i>Females</i>		<i>Total Per Cent</i>
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	
Wage-and-salary	6	(720)	8	(350)	7
Self-employed	8	(183)	13	(31)	8
Total	6		8		7

Percentage of Respondents Reporting Their Job Satisfaction Level as Having Altered Since Beginning Present Jobs

	<i>Males</i>		<i>Females</i>		<i>Total Per Cent</i>
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	
Wage-and-salary	57	(719)	61	(353)	58
Self-employed	59	(187)	74	(31)	62
Total	58		70		59

Percentage of Respondents Reporting Their Job Satisfaction Level as Having Decreased Since Beginning Present Jobs

	<i>Males</i>		<i>Females</i>		<i>Total Per Cent</i>
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	
Wage-and-salary	10	(719)	9	(353)	10
Self-employed	14	(187)	39	(31)	17
Total	11		12		11

Mean Tension

	<i>Males</i>		<i>Females</i>		<i>Total Mean</i>
	<i>Mean</i>	<i>N</i>	<i>Mean</i>	<i>N</i>	
Wage-and-salary	1.7	(722)	1.5	(351)	1.6
Self-employed	1.8	(176)	2.0	(31)	1.9
Total	1.7		1.6		1.7

Percentage of Respondents Reporting Some Job-Related Worries in Open-Ended Question

	<i>Males</i>		<i>Females</i>		<i>Total Per Cent</i>
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	
Wage-and-salary	54	(710)	46	(349)	52
Self-employed	81	(189)	77	(31)	80
Total	66		49		56

Percentage of Respondents Reporting Being "In Middle"

	<i>Males</i>		<i>Females</i>		<i>Total Per Cent</i>
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	
Wage-and-salary	48	(658)	31	(324)	43
Self-employed	50	(116)	38	(16)	48
Total	48		32		43

*Age**Percentage of Respondents Reporting Themselves in Less than "Excellent" Health*

<i>Age</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
18-24	9	(58)	14	(55)	25	(8)
25-34	20	(234)	18	(73)	25	(16)
35-44	18	(167)	31	(97)	13	(61)
45-54	39	(174)	40	(65)	35	(68)
55 and over	41	(87)	35	(62)	25	(40)

Percentage of Respondents Reporting Themselves as Having Been Absent from Their Jobs for at Least One Day During Previous Year

<i>Age</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
18-24	79	(56)	55	(55)	25	(8)
25-34	54	(234)	68	(73)	62	(16)
35-44	50	(169)	70	(95)	20	(59)
45-54	54	(174)	60	(63)	25	(64)
55 and over	54	(87)	56	(62)	47	(38)

Percentage of Respondents Reporting Their Job Satisfaction Level as Having Altered Since Beginning Present Jobs

Age	Wage-and-salary Males		Wage-and-salary Females		Self-employed Males	
	Per Cent	Base N	Per Cent	Base N	Per Cent	Base N
18-24	66	(58)	69	(55)	75	(8)
25-34	62	(233)	63	(73)	75	(16)
35-44	61	(171)	66	(97)	80	(61)
45-54	48	(172)	46	(65)	44	(66)
55 and over	48	(85)	60	(62)	42	(36)

Percentage of Respondents Reporting Their Job Satisfaction Level as Having Decreased Since Beginning Present Jobs

Age	Wage-and-salary Males		Wage-and-salary Females		Self-employed Males	
	Per Cent	Base N	Per Cent	Base N	Per Cent	Base N
18-24	7	(58)	15	(55)	0	(8)
25-34	16	(233)	15	(73)	13	(16)
35-44	9	(171)	8	(97)	13	(61)
45-54	5	(172)	8	(65)	18	(66)
55 and over	9	(85)	2	(62)	11	(36)

Percentage of Respondents Reporting Themselves Less than Satisfied with Their Present Jobs

Age	Wage-and-salary Males		Wage-and-salary Females		Self-employed Males	
	Per Cent	Base N	Per Cent	Base N	Per Cent	Base N
18-24	5	(58)	11	(53)	0	(8)
25-34	7	(232)	11	(73)	0	(16)
35-44	6	(171)	6	(96)	7	(61)
45-54	6	(174)	8	(65)	12	(66)
55 and over	6	(85)	5	(62)	6	(32)

Mean Tension

<i>Age</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>M</i>	<i>Base N</i>	<i>M</i>	<i>Base N</i>	<i>M</i>	<i>Base N</i>
18-24	1.5	(58)	1.6	(55)	1.4	(6)
25-34	1.8	(234)	1.7	(73)	2.1	(16)
35-44	1.8	(169)	1.5	(95)	1.8	(54)
45-54	1.6	(174)	1.5	(65)	1.8	(62)
55 and over	1.5	(87)	1.5	(62)	1.8	(38)

Percentage of Respondents Reporting Some Job-Related Worries in Open-Ended Question

<i>Age</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
18-24	41	(56)	45	(55)	75	(8)
25-34	60	(230)	49	(73)	100	(16)
35-44	58	(167)	41	(95)	81	(57)
45-54	54	(170)	52	(65)	84	(68)
55 and over	39	(80)	47	(60)	70	(40)

Percentage of Respondents Reporting Being "In Middle"

<i>Age</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
18-24	49	(49)	21	(48)	50	(4)
25-34	54	(222)	51	(69)	43	(14)
35-44	50	(149)	31	(91)	42	(38)
45-54	46	(160)	29	(62)	58	(45)
55 and over	32	(78)	19	(53)	53	(15)

*Education**Percentage of Respondents Reporting Themselves in Less than "Excellent" Health*

<i>Education</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
Completed grade school	46	(181)	43	(72)	37	(49)
Some high school	23	(131)	31	(74)	38	(16)
Completed high school	21	(204)	24	(107)	18	(67)
Some college	17	(101)	13	(47)	13	(31)
Completed college	13	(100)	24	(53)	21	(28)

Percentage of Respondents Reporting Themselves as Having Been Absent from Their Jobs for at Least One Day During Previous Year

<i>Education</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
Completed grade school	57	(183)	58	(72)	30	(47)
Some high school	50	(131)	62	(72)	25	(16)
Completed high school	50	(202)	56	(107)	33	(67)
Some college	62	(101)	72	(47)	32	(31)
Completed college	61	(100)	74	(51)	38	(26)

Percentage of Respondents Reporting Their Job Satisfaction Level as Having Altered Since Beginning Present Jobs

<i>Education</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
Completed grade school	45	(183)	47	(72)	36	(47)
Some high school	66	(128)	50	(74)	38	(16)
Completed high school	55	(204)	72	(107)	66	(67)
Some college	61	(99)	72	(47)	83	(29)
Completed college	69	(102)	62	(53)	75	(28)

Percentage of Respondents Reporting Their Job Satisfaction Level as Having Decreased Since Beginning Present Jobs

<i>Education</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
Completed grade school	8	(183)	6	(72)	8	(47)
Some high school	8	(128)	5	(74)	12	(16)
Completed high school	6	(204)	11	(107)	18	(67)
Some college	20	(99)	11	(47)	7	(29)
Completed college	14	(102)	15	(53)	21	(28)

Percentage of Respondents Reporting Themselves Less than Satisfied with Their Present Jobs

<i>Education</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
Completed grade school	5	(183)	7	(72)	9	(45)
Some high school	8	(131)	0	(73)	0	(16)
Completed high school	5	(204)	16	(107)	8	(61)
Some college	8	(97)	9	(45)	6	(31)
Completed college	6	(102)	4	(53)	1	(28)

Mean Tension

<i>Education</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>M</i>	<i>Base N</i>	<i>M</i>	<i>Base N</i>	<i>M</i>	<i>Base N</i>
Completed grade school	1.4	(183)	1.4	(70)	1.7	(41)
Some high school	1.6	(131)	1.4	(75)	1.8	(16)
Completed high school	1.6	(204)	1.6	(108)	1.9	(60)
Some college	1.8	(101)	1.5	(47)	1.7	(31)
Completed college	2.0	(100)	1.8	(53)	2.0	(28)

Percentage of Respondents Reporting Some Job-Related Worries in Open-Ended Question

<i>Education</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
Completed grade school	42	(183)	34	(70)	74	(49)
Some high school	51	(131)	43	(74)	75	(16)
Completed high school	56	(196)	35	(107)	83	(65)
Some college	50	(97)	57	(47)	90	(29)
Completed college	80	(100)	82	(51)	82	(28)

Percentage of Respondents Reporting Being "In Middle"

<i>Education</i>	<i>Wage-and-salary Males</i>		<i>Wage-and-salary Females</i>		<i>Self-employed Males</i>	
	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>	<i>Per Cent</i>	<i>Base N</i>
Completed grade school	32	(163)	11	(65)	38	(21)
Some high school	41	(125)	27	(71)	40	(10)
Completed high school	50	(186)	36	(92)	62	(37)
Some college	57	(89)	35	(46)	33	(24)
Completed college	70	(93)	52	(50)	62	(24)

C

Construction of the Role

Conflict Index

The role conflict index covered two major content areas: pressures toward change in activities performance and pressures toward change in personal style. The conceptual distinction between these two areas is presented in Chapter 3.

Activities Component 1

With respect to each of the activities on the focal person's activities list (see Chapter 3), each role sender was asked:

Nearly everyone has some things he'd want people he works with to do differently. Would you like Mr. (name of focal person) to do this activity *exactly* the way he is now, or would you like him to do it *in any way* differently than he does now.

Each role sender responded in terms of the following fixed alternatives: Same; Different; Doesn't matter; Don't know.

For each role set the conflict index was the ratio of total number of Different responses over the maximum number of Different responses. The maximum number of such responses was Nk minus the total number of Don't know, Doesn't matter, or Inapplicable responses, where N is the number of role senders in the set and k is the number of activities on the activities list. An Inapplicable response was one indicating that the role sender in a previous question had responded that the particular activity did not concern him either Very Much or Somewhat.

Activities Component II

For each activity a role sender was asked:

Everyone has some idea as to how he'd like others around him to divide their time. For each activity on this list, pick the statement which best represents how much time you would like Mr. (name of focal person) to spend on it.

The seven response categories provided the role sender and the code value assigned to each were as follows:

<i>Code</i>	<i>Response</i>
0	Same as He Does Now
1	A Little More Than He Does Now A Little Less Than He Does Now
2	Somewhat More Than He Does Now Somewhat Less Than He Does Now
3	Great Deal More Than He Does Now Great Deal Less Than He Does Now

Where X corresponds to the above coding values, N to the total number of role senders in the set, and k to the number of activities on the activities list, the conflict index score for the set was defined as the ratio of observed pressure away from Same to maximum possible pressure away from Same.

$$\text{Observed pressure away from Same} = \sum_{i=1}^k \sum_{j=1}^N X.$$

Maximum pressure = $3Nk$ minus 3 times the number of Not Ascertained responses.

Stylistic Component I

Each role sender was asked the following open-ended question:

I've already asked you to describe Mr. (name of focal person) for me. Now I'd like to ask a somewhat different question. How would you like him to be different from the way he is now?

For each role sender the number of distinguishable ways in which he wanted the focal person to be different was coded, yielding an inter-coder reliability of .85.

For each role set two scores were then obtained:

- a. Mean number of ways senders in a given role set wanted the focal person to be different, and
- b. Proportion of senders in the role set indicating they wished the focal person to be different in at least one way.

These raw scores were then converted to standardized *T* scores, and the total of these two *T* scores constituted stylistic component I.

Stylistic Component II

Each role sender was provided with a list of the following 22 traits:

1. Shy
2. Self-confident
3. Excitable
4. Makes friends easily
5. Has ups and downs in mood
6. Likes to have strict discipline enforced
7. Aggressive
8. Is in close touch with things going on around him
9. Impulsive, often acts on the spur of the moment
10. Carefree, easygoing
11. Sensitive to others, sympathetic to others
12. Cheerful
13. Tense, edgy, jittery
14. Self-conscious, easily embarrassed
15. Socially bold, self-assertive
16. Prefers to work things out in his own way
17. Resists control, resents being given orders
18. Quick to find fault with things, very critical
19. Independent
20. Likes things to be clean, neat, and orderly
21. Ambitious
22. Businesslike

The role sender was then asked to describe, using this trait list, the sort of person he would best like to work with in the focal person's position. This description of the ideal focal role occupant was given by the sender's checking for each trait one of the following four alternatives:

<i>Code</i>	<i>Response</i>
1	Very true
2	Somewhat true
4	Somewhat untrue
5	Very untrue

Using this same trait list, the respondent was then asked to describe the individual presently occupying the focal position (real description). For each sender responding to each trait a discrepancy score was obtained by subtracting his real description score from his ideal description score and squaring this difference to eliminate its sign. Each sender's total discrepancy score was the sum of his discrepancy scores over all the 22 items.

Stylistic components index II was the cluster mean of all individual senders' discrepancy scores.

Role Conflict Index

The above four components of the total role conflict index were converted to standardized *T* scores, and the total of these constituted the index of role conflict. The correlations of these components with the total index were:

Activities component I $r = .86$

Activities component II $r = .72$

Stylistic component I $r = .69$

Stylistic component II $r = .62$

Computation of sent pressure scores for individual role senders proceeded on the same principles as the computation of the role set-level conflict index. The only exception to this rule was that for stylistic component I, a sender's score was simply the total number of ways in which he wished the focal person to be different.

D

Construction of Ambiguity Measures

Ambiguity Concerning Role Expectations

The focal person was asked with respect to each of his role senders:

As far as you know, does he usually let you know when he expects or wants something from you, or does he often keep these things to himself?

The response categories provided and the code value assigned to each were as follows:

<i>Code</i>	<i>Response</i>
1	Always lets me know
2	Usually lets me know
3	Sometimes does, sometimes doesn't
4	Usually does not let me know
5	Never lets me know

The mean evaluation of his role senders by a given focal person constituted this person's ambiguity concerning role expectations score.

Ambiguity Concerning Evaluations

The focal person was asked with respect to each of his role senders:

Do you usually feel that you know how satisfied he is with what you do?

The response categories provided and the code value assigned to each were as follows:

<i>Code</i>	<i>Response</i>
1	Always know where I stand
2	Usually know
3	Sometimes, and sometimes not
4	Often somewhat in the dark
5	Usually don't know where I stand

The mean evaluation of his role senders by a given focal person constituted this person's ambiguity concerning evaluations score.

Ambiguity Index

The first three items in the ambiguity index, together with the response alternatives provided the respondent and the codes assigned these alternatives, were as follows:

1. Do you feel you are always as clear as you would like to be about what you have to do on this job?

<i>Code</i>	<i>Response</i>
1	Yes
5	No

2. (Immediately following the above question in the interview) Which of the following alternatives best represents how clear you are?

<i>Code</i>	<i>Response</i>
1	I am very clear
2	Quite clear on most things
3	Fairly clear
4	Not too clear
5	I am not at all clear

3. How clear are you about the limits of your authority in your present position?

Codes and responses were identical to item 2 above.

Respondent's total ambiguity index was his total score on the above three items plus his scores on the ambiguity concerning role expectations and ambiguity concerning evaluations indexes. A linear transformation subsequently reduced this grand total to a one-digit score.

E

Normative Expectation Items

In assessing the normative expectations of each role sender for the focal person, each role sender was presented a list of 36 items describing behaviors in which the focal person might engage. The role sender was then asked:

Down the left side of this page are a number of things Mr. (name of focal person) might do. For each of the things I'd like to get your personal opinion as to whether you'd like him to do it or not do it. The headings at the top of each column on the right indicate the degree to which you'd personally like to see him do it. Next to each thing listed, just check in the column that best expresses your feelings.

The columns were headed:

Strongly prefer he do it
Somewhat prefer he do it
Doesn't matter to me
Somewhat prefer he not do it
Strongly prefer he not do it

The 36 normative expectation items were as follows:

1. Accept judgments of higher-ups as final.
2. Come up with new, original ideas for handling work.
3. Try to make himself look good in the eyes of higher-ups whenever possible.
4. Spend time off the job with others in the company who have a much lower position than his.
5. Break company rules when he thinks it is in the company's best interest.
6. Report others who break company rules.

7. Take an occasional day off just to relax.
8. By-pass official channels when he wants something done in a hurry.
9. Stick to the letter of company rules.
10. Tell things to higher-ups that might make him look bad.
11. Take advantage of every opportunity for promotion.
12. Carry out orders even if he thinks they are unsound.
13. Withhold information from higher-ups which puts a co-worker in a bad light.
14. Do favors for friends contrary to company rules.
15. Tell higher-ups his frank opinion even if it will hurt them.
16. Do the best he can, even if it makes a co-worker look bad by comparison.
17. Report to his superior any short-cuts he uses in his work.
18. Defend his co-workers from criticism by their superiors.
19. Spend time off the job with others who have a much higher position than his.
20. Spend most of his time in supervisory matters.
21. Let those he supervises set their own work-pace.
22. Train men under him for better jobs.
23. Be responsible for keeping up the morale of those under him.
24. Try to cover up errors made by those under him.
25. Take a personal interest in his men.
26. Take sides with his men in any dispute with the company.
27. Carry out orders his men don't like.
28. Give special attention to friends in making recommendations for promotion.
29. Accept full responsibility for the decisions of those under him.
30. Consult with his men in making any decisions that affect them.
31. Keep an eye on the personal life of those under him.
32. Withhold from his men information his own superiors don't want passed on.
33. Check frequently on the work of his men.
34. Leave the men he supervises alone unless they want help.
35. Keep men informed on what is happening in the company.
36. Allow his men a great deal to say about the way they do their work.

F

Loadings of 36 Normative Items on the Seven Normative Factors

Item Number ¹	Factor ²						
	I	II	III	IV	V	VI	VII
1	-.422	-.008	.117	.003	.076	-.014	.021
2	-.008	-.342	.084	-.074	.219	.139	-.156
3	-.105	-.102	-.070	.118	.441	-.123	-.026
4	.299	-.047	-.021	.025	.089	-.342	.095
5	.335	.002	-.215	.234	-.063	-.087	-.255
6	-.188	-.208	.415	-.296	.196	-.097	-.122
7	.366	.032	-.284	.161	-.025	-.202	-.183
8	.388	.110	-.106	.103	-.047	-.077	-.219
9	-.696	-.078	.173	-.152	.144	-.026	.013
10	.127	-.049	.119	-.094	-.035	.216	-.383
11	-.145	-.146	-.058	-.128	.614	.087	-.009
12	-.203	.041	.253	-.039	.156	.282	-.106
13	.166	-.040	-.108	.616	-.059	.064	.115
14	.051	.292	-.027	.428	-.021	-.257	-.143
15	.027	-.072	-.082	-.166	.051	.059	-.568
16	-.013	-.186	.138	-.112	.181	.439	-.220
17	-.201	-.310	.135	-.200	.163	.178	-.093
18	.065	-.206	-.182	.249	.092	-.011	.016
19	.394	-.185	.016	.032	.278	-.099	.052
20	-.337	-.209	.118	-.095	.025	.135	-.064
21	.083	.068	-.680	.096	.086	-.121	-.084

¹ Numbers correspond to those assigned items in Appendix E.

² Factor descriptions are given in Chapter 9.

Factor

<i>Item Number</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>V</i>	<i>VI</i>	<i>VII</i>
22	-.032	-.608	-.037	.007	.265	.247	-.037
23	-.072	-.578	.075	-.007	.044	-.011	-.046
24	.171	.059	-.212	.533	-.031	-.166	.108
25	-.060	-.582	.018	-.065	.030	-.013	-.010
26	.237	.013	-.390	.141	-.005	-.162	.034
27	-.212	-.213	.200	.077	.020	.437	-.121
28	-.167	.324	.024	.267	.072	-.439	-.077
29	-.072	-.419	-.025	.092	-.103	.160	-.210
30	.005	-.372	-.307	-.010	.060	-.045	.149
31	-.158	-.270	.128	-.076	-.084	-.092	-.162
32	-.006	-.281	.249	.030	.136	.290	.087
33	-.326	-.327	.380	-.114	-.048	.063	-.057
34	.044	-.000	-.500	.072	.038	-.062	.034
35	.034	-.440	-.274	-.131	.036	.072	.050
36	.178	-.231	-.595	.048	-.027	.053	-.001

G

Public Image Factor Scores

The public image factor scores assigned to each role sender indicated the positions on five personality factors at which he perceived the focal person. The raw data used in computing these scores were the role sender's descriptions of the focal person on the 22 traits listed in Appendix C. The intercorrelations of these 22 traits on the sample of 381 role senders were subjected to a factor analysis, the results of which are given in Appendix H. From the information provided by this factor analysis, public image factor scores were computed for each role sender in a manner identical to that used in the computation of normative expectation factor scores (see Chapter 9).

These five factors, together with the items chosen to represent each, are as follows:

I: Emotional Stability

(not) excitable
(not) tense, edgy, jittery
(not) impulsive, often acts on the spur of the moment
(not) has ups and downs in mood
(not) quick to find fault with things, very critical
(not) resists control, resents being given orders
cheerful

II: Assertive Self-Confidence

(not) shy
aggressive
(not) self-conscious, easily embarrassed

self-confident

is in close touch with things going on around him

socially bold, self-assertive

ambitious

III: Independence

independent

prefers to work things out in his own way

self-confident

resists control, resents being given orders

socially bold, self-assertive

IV: Industriousness

businesslike

likes things to be clean, neat, and orderly

ambitious

is in close touch with things going on around him

likes to have strict discipline enforced

aggressive

V: Sociability

makes friends easily

cheerful

sensitive to others, sympathetic to others

carefree, easygoing

(not) resists control, resents being given orders

H

Loadings of 22 Traits on Five

Public Image Factors

Trait ¹	Factor				
	I	II	III	IV	V
1. Shy	.081	.766	-.011	-.040	-.011
2. Self-confident	.005	-.462	-.313	-.221	-.115
3. Excitable	-.725	-.126	-.082	.075	.123
4. Friendly	.219	-.090	.150	-.068	-.683
5. Moody	-.589	.008	.014	.041	.155
6. Disciplinarian	-.076	-.280	.124	-.386	.160
7. Aggressive	-.181	-.686	-.159	-.343	-.022
8. In close touch	.146	-.387	-.085	-.426	-.147
9. Impulsive	-.649	-.148	-.232	.002	.132
10. Carefree	.074	.094	-.094	.257	-.396
11. Sensitive, sympathetic	.110	.156	-.142	.146	-.493
12. Cheerful	.334	-.031	.003	-.131	-.663
13. Tense	-.672	.044	-.085	.108	.235
14. Self-conscious	-.278	.461	-.026	-.044	.013
15. Socially bold	-.271	-.380	-.290	.213	.104
16. "Own Way"	-.154	-.054	-.599	-.123	.156
17. Resists control	-.424	-.055	-.289	.153	.343
18. Critical	-.509	-.090	-.114	.030	.261
19. Independent	-.144	-.100	-.759	-.002	-.010
20. Tidy	.149	.023	.020	-.520	-.138
21. Ambitious	.011	-.364	-.183	-.433	.069
22. Businesslike	.290	-.159	-.066	-.575	-.106

¹ A complete description of the phrases identifying each trait is given in Appendix C.

I

Items in Job-Related Tension Index

Interviewer introduced items by asking respondents:

All of us occasionally feel bothered by certain kinds of things in our work. I'm going to read a list of things that sometimes bother people, and I would like you to tell me how frequently you feel bothered by each of them.

In the national survey respondents were then presented the following items:

- A. Feeling that you have too little authority to carry out the responsibilities assigned to you
- B. Being unclear on just what the scope and responsibilities of your job are
- C. Not knowing what opportunities for advancement or promotion exist for you
- D. Feeling that you have too heavy a work load, one that you can't possibly finish during an ordinary workday
- E. Thinking that you'll not be able to satisfy the conflicting demands of various people over you
- F. Feeling that you're not fully qualified to handle your job
- G. Not knowing what your supervisor thinks of you, how he evaluates your performance
- H. The fact that you can't get information needed to carry out your job
- I. Having to decide things that affect the lives of individuals, people that you know
- J. Feeling that you may not be liked and accepted by the people you work with

- K. Feeling unable to influence your immediate supervisor's decisions and actions that affect you
- L. Not knowing just what the people you work with expect of you
- M. Thinking that the *amount* of work you have to do may interfere with how *well* it gets done
- N. Feeling that you have to do things on the job that are against your better judgment
- O. Feeling that your job tends to interfere with your family life

In the intensive study items L-O were omitted from the total Tension index and the following items were used instead:

- P. Feeling that your progress on the job is not what it should be or could be
- Q. Thinking that someone else may get the job above you, the one you are directly in line for
- R. Feeling that you have *too much* responsibility and authority delegated to you by your superiors.

Computation of Total Tension Scores

Intensive study: Respondent answered each item by choosing one of five fixed alternative responses: Never; Rarely; Sometimes; Rather Often; Nearly all the Time. These alternatives were assigned coding values of from 1 to 5 respectively. Respondent's over-all Tension score was his total score summed over the 14 items. This total score was subsequently converted to a one-digit code.

National survey: In addition to being given the five response alternatives just described, respondent was also provided with a Doesn't Apply category. Respondent's total Tension score was his average score over all the items to which he did *not* respond "Doesn't Apply."

J

Intercorrelation Matrices of
Tension Items for National
Survey (NS) and Intensive Study (IS)

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>I</i>	<i>J</i>	<i>K</i>	<i>L</i>	<i>M</i>	<i>N</i>	<i>O</i>	<i>P</i>	<i>Q</i>	<i>R</i>	<i>Item</i> ¹	
.49	.38	.20	.32	.16	.37	.38	.19	.30	.42	.32	.24	.40	.11	—	—	—	—	NS	A
.70	.49	.27	.30	-.02	.46	.56	.18	.15	.38	—	—	—	—	.40	.19	.25	IS		
	.36	.19	.40	.30	.37	.42	.28	.24	.39	.43	.32	.34	.14	—	—	—	—	NS	B
	.27	.37	.38	.28	.45	.56	.22	.20	.42	—	—	—	—	.35	.20	.40	IS		
		.22	.23	.16	.31	.34	.16	.16	.33	.26	.22	.19	.05	—	—	—	—	NS	C
		.21	-.06	-.09	.14	.16	.20	.09	.30	—	—	—	—	.48	.30	-.11	IS		
			.38	.19	.20	.24	.31	.21	.26	.31	.54	.28	.25	—	—	—	—	NS	D
			.33	.48	.29	.40	.27	.29	.20	—	—	—	—	.24	.18	.50	IS		
				.33	.42	.38	.36	.40	.45	.47	.46	.33	.23	—	—	—	—	NS	E
				.22	.29	.32	-.00	.13	.25	—	—	—	—	.34	.22	.50	IS		
					.25	.23	.25	.23	.16	.32	.33	.18	.14	—	—	—	—	NS	F
					.26	.14	.45	.53	.30	—	—	—	—	.12	.20	.25	IS		

G	.31	.20	.36	.42	.50	.26	.29	.12	—	.46	—	NS
	.34	.29	.48	.47	—	—	—	—	.14	.32	IS	
H		.31	.24	.43	.36	.35	.39	.14	—	—	NS	
	.16	.10	.26	.26	—	—	—	—	.21	.43	IS	
I		.31	.31	.32	.29	.38	.31	.23	—	—	NS	
		.58		.19	—	—	—	—	.19	.30	IS	
J			.39	.39	.40	.35	.32	.24	—	—	NS	
			.43		—	—	—	—	.27	.26	IS	
K					.43	.28	.35	.18	—	—	NS	
					—	—	—	—	.48	.57	IS	
L						.43	.34	.18	—	—	NS	
						—	—	—	—	—	IS	
M							.37	.29	—	—	NS	
							—	—	—	—	IS	
N								.20	—	—	NS	
							—	—	—	—	IS	
O								—	—	—	NS	
							—	—	—	—	IS	
P								—	—	—	NS	
										.38	IS	
Q										—	NS	
										—	IS	
										—	—	

¹ Letters correspond to those assigned items in Appendix I.

K

Items in Job-Satisfaction Index

Respondents were administered items comprising the job-satisfaction measure as part of the personality inventory. These items, together with the response alternatives provided and the scoring weights assigned these alternatives, were:

- A. Is there some other work, either here or outside your company, which you would like better than what you are now doing?
- (1) I would rather have some other job.
 - (5) I would rather have my present job.
- B. Not counting all the other things that make your particular job good or bad, how do you like the kind of work that you do?
- (1) I dislike it very much; would prefer almost any other kind of work.
 - (2) I don't like it very much; would much prefer some other kind of work.
 - (3) It's all right, but there are other kinds of work I like better.
 - (4) I like it very much, but there are other kinds of work I like just as much.
 - (5) It's exactly the kind of work I like best.
- C. How do you feel about the progress you have made in this company?
- (1) I have made little or no progress.
 - (2) I have made some progress, but it should have been much better.
 - (4) I have made quite a lot of progress, but it should have been better.
 - (5) I have made a great deal of progress.

D. How much does your job give you a chance to do the things you are best at?

- (1) No chance at all
- (2) Very little chance
- (3) Some chance
- (4) Fairly good chance
- (5) Very good chance

E. How do you like working for this company?

- (1) It's not a very good place to work.
- (2) It's all right, but there are many things that should be changed.
- (3) It's a fairly good place, but quite a few things should be changed.
- (4) It's a good place, but there are a few things that should be changed.
- (5) It's a very good place—wouldn't change anything.

F. Would you advise a friend to come and work for this company?

- (1) I would not advise a friend to come and work for this company.
- (5) I would advise a friend to come and work for this company.

G. If you had a chance to do the same kind of work for the same pay, but in another company, would you stay here?

- (1) I would prefer to go to the other company.
- (5) I would stay in this company.

Respondent's total job satisfaction score was his total score over these seven items coded as above. This total was subsequently converted to a one-digit code.

L

Items in Confidence-in- Organization Measure

Respondents were administered the confidence-in-organization measure as part of the personality inventory. In this measure the respondent's attitudes toward his superior were assumed to embody his attitudes toward company management in general. The items constituting this measure, together with the response alternatives provided and the scoring weights assigned these alternatives, were:

A. How well does your boss know the jobs he supervises?

- (1) He knows very little about the jobs.
- (2) He doesn't know the jobs very well.
- (4) He knows the jobs fairly well.
- (5) He knows the jobs very well.

B. How much is your boss interested in helping those who work under him get ahead in the company?

- (1) He doesn't want them to get ahead.
- (2) He doesn't care whether they get ahead or not.
- (3) He is glad to see them get ahead, but he doesn't help them much.
- (4) He helps them get ahead, if he gets a chance.
- (5) He goes out of his way to help them get ahead.

C. Taking it all in all, how well would you say your boss does his job?

- (1) He does a poor job.
- (2) He does a fair job.
- (3) He does a good job.

- (4) He does a very good job.
- (5) He does an excellent job.

D. How good would you say your boss is at dealing with the people he supervises?

- (1) He is poor at handling people.
- (2) He is *not* very good at dealing with people; does other things better.
- (3) He is fairly good at dealing with people.
- (4) He is good at this—better than most.
- (5) He is very good at this—it's his strongest point.

E. What happens when someone on your level makes a complaint about something?

- (1) It's hardly ever taken care of.
- (2) It's often *not* taken care of.
- (4) It's usually taken care of.
- (5) It's almost always taken care of.

Respondent's confidence-in-organization score was his total score taken over these five items coded as above. This total was subsequently reduced to a one-digit code.

M

Master Activities Lists and

Measures Based on These Lists

A Master Activities List for each focal person was constructed from two sources of information:

1. The list of job activities provided by the focal person in his first focal interview, and
2. The job activities applicable to the focal person's job provided by role senders in response to the following questions:

If you had to tell someone who knows absolutely nothing about Mr. (name of focal person)'s job, how would you describe his job?

Does Mr. (name of focal person) have any other major responsibilities?

What specific things does Mr. (name of focal person) have to do to see that these responsibilities are met?

Does Mr. (name of focal person) have any responsibilities in the company outside of his regular job—like responsibilities to a special committee or to a union?

The total list of activities provided in this manner were then arranged into a three-order outline not to exceed 15 major headings (see sample attached).

Job Conception Adequacy

Each role sender's free listing of the focal person's job activities in response to the above questions was evaluated as to the degree to which it reproduced the Master Activities List for that focal person. This job conception adequacy score was defined operationally as the ratio of the number of activities "mentioned" by the role sender over the total number of activities on the Master Activities List for that role set.

A role sender could be given credit in a number of ways for "mentioning" an activity.

1. He could specifically refer to that activity in his spontaneous description.

2. If he mentioned one "first-order" activity (one indicated by a Roman numeral) and at least one "second-order" activity included under it (one indicated by an Arabic numeral), he was given credit for having mentioned all the second activities listed under this first-order one. For example, on the Master Activities List attached, if the role sender said "in charge of accounts receivable" and "processes cash receipts," he would have been credited with having mentioned I, 11, 12, 13, 14, 15, and 16.

3. If he mentioned half or more of the second-order activities under a given first-order activity, he was given credit for having mentioned the first-order activity and *all* the second-order activities under it. If, for example, he mentioned 11, 12, and 13, he would have been credited with mentioning I, 14, 15, and 16 as well.

In a similar manner a sender could be credited with mentioning all of a second-order activity were he to mention:

a. That second-order activity and at least one third-order (lettered) activity beneath it, or

b. Half or more of the third-order activities beneath this second-order one.

Other scores based on these Master Activities Lists were: importance of company boundary contacts; importance of departmental boundary contacts: creative or innovative demands. For a fuller description of these variables see Chapters 6 and 7.

Master Activities List--Role Set 1100

I. In charge of accounts receivable

1. inter-company accounts maintained for subsidiaries, acts as clearing house
2. reviews inter-company accounts, reconciles them
3. processes cash receipts
4. statements to customers and subsidiaries, e.g., delinquent statements
5. conferences with foreign subsidiaries
6. responsible for inter-company accounting procedures, letters of instruction

II. In charge of accounts payable (disbursements)

1. payment for materials, supplies, equipment
2. settlement of liabilities
3. processes disbursements
 - a. payments for foreign accounts
 - b. payments for domestic accounts
 - c. purchase payments for world-wide subsidiaries

III. Handles problems

1. special jobs for assistant controller or office manager, e.g., court cases
2. devises procedures for handling accounting materials
3. refers problems to higher-ups
4. investigates accounting errors and takes remedial action
5. meetings with office manager

IV. In charge of office services

1. microfilming, coordinator in charge of microfilm program
2. statistical help, comptometer pool
3. file room, information retrieval program
4. mail room, messengers

V. Supervision

1. consults with group heads (accounts payable and receivable groups)
2. staff meetings, consults with his staff
3. makes supervisory decisions

VI. Personnel administration

VII. Coordination

1. obtains information from other sections and departments, keeps in contact with department personnel
2. responsible to distribution groups who receive accounting documents from other companies
 - a. sees that these documents are in on time
 - b. routes these documents, passes on accounting materials

VIII. Committees

1. publicity committee

N

Loadings of 25 Personality Measures on Six Personality Factors

<i>Measure</i>	<i>Factor</i>					
	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>V</i>	<i>VI</i>
1. Total anxiety (IPAT)	.901	-.368	.059	-.126	.127	-.102
2. Cyclothymia (16PF)	-.304	-.035	.000	.317	-.298	-.007
3. Intelligence (16PF)	-.155	-.102	.119	-.465	-.275	-.005
4. Surgency (16PF)	-.365	-.202	.020	.570	-.124	.067
5. Parmia (16PF)	-.272	.076	.079	.370	-.170	.212
6. Premsia (16PF)	.052	-.059	.152	-.095	-.185	-.073
7. Neuroticism (Bernreuter)	.484	-.226	-.206	-.563	.063	-.057
8. Introversion (Bernreuter)	.154	-.052	.152	-.474	.162	.039
9. Flexibility (CPI)	.038	-.079	.760	-.019	-.021	-.005
10. Responsibility (CPI)	-.157	.552	.228	-.277	-.288	.005
11. Self-control (CPI)	-.206	.775	-.088	-.057	.024	.117
12. Tolerance (CPI)	-.268	.406	.321	-.118	-.248	.181
13. Lassitude (MMPI)	.726	-.032	-.091	.037	.185	-.068
14. Dependence (ISR)	.224	.233	-.135	.369	.020	-.075
15. Need cognition (ISR)	-.078	.291	.040	-.022	-.180	.179
16. Job satisfaction (ISR)	.271	.112	-.013	-.104	.147	.448
17. Confidence in organization (ISR)	-.103	.059	.048	.079	-.124	.785
18. Physiological anxiety (CMI)	.429	-.063	-.470	-.155	-.234	-.153
19. Loss of will power (IPAT)	.506	-.447	.275	-.288	-.203	-.084
20. Low ego strength (IPAT)	.175	-.457	-.079	.053	.211	-.103
21. Protension (16PF)	.346	-.194	.046	-.136	.652	-.168
22. Anxiety (IPAT)	.771	-.056	.063	-.037	.133	.010
23. Tension (IPAT)	.742	-.092	-.182	-.040	-.053	-.072
24. Unhappy childhood (ISR)	.351	-.486	-.106	-.019	.379	.016
25. Lie (ISR)	-.273	.726	-.087	.280	-.059	-.003

O

First Focal Interview

(Intensive Study)

Section A: Description of Focal Office

- A-1. How would you describe your job to someone who knows absolutely nothing about it?
- A-2. We will want to refer back later to the major activities involved in your job, so I would like to try to organize them into a list now. Can you tell me what should be included in such a list?
- A-3. Some of your activities are probably more important to your job than others. I would like you to rank all the items on this list in order of their importance.

Section B: Sources of Role Definition

- B-1. How do you know what you are supposed to do in this job? How do you find out about your responsibilities and what you have to do to meet them?
- B-1a. How about written documents like job descriptions, policy statements, memos, and so on—do they help determine your activities?
- B-1b. Professional schooling or specialized training?
- B-1c. Professional, technical, or business associations or organizations—do they help you know how to do your job?
- B-2. To what extent have you been able to define this job for yourself—to carve out your own area of responsibility, to make major changes in your activities, and the like?

[For question B-2, respondent is given a card with the following fixed alternatives: Completely; To a considerable extent; Somewhat; Very little; Not at all.]

- B-3. Who is your immediate supervisor—the person you report directly to? What is his position in the company?

- B-4. Is there anyone else you report to—anyone else to whom you are directly responsible for some of your activities?
- B-5. Are you a supervisor? Is there anyone who reports directly to you?
- B-6. Are there any other people you have to be concerned with—either because their work affects you or your work affects them?
- B-7. Are there any people who are important to you personally—with whom you might discuss your work?
- B-7a. Anyone outside the company like that?
- B-8. Is there anyone else who might have a real interest in what you do on the job?

Section C: Relations with Role Senders

[All persons named by respondent in reply to questions B-3 through B-8 are listed by interviewer. Questions C-1 and C-2 are asked with reference to all these persons.]

- C-1. Now I'd like to ask you a series of questions and for each one I'd like you to give an answer for each person on the list. We will use these cards to indicate the answers. First, I'd like you to tell me how important each of these persons is in determining how you do your job.

[For question C-1, respondent is presented a card with the following fixed alternatives: Not at all important, Not too important, Somewhat important, Quite important, Extremely important.]

- C-2. How often do you talk with each of them?

[For question C-2, respondent is presented a card with the following fixed alternatives: Almost constantly, Several times a day, Once or twice a day, Several times a week, About once a week, A few times a month, Less often than a few times a month.]

[On the basis of responses to C-1 and C-2, interviewer restricts subsequent questioning in sections C and D to those persons whom he intends to have interviewed later as role senders.]

- C-3. Suppose you were having some sort of difficulty in your job. To what extent do you feel each of these people would be willing to go out of his way to help you if you asked for it?
- C-4. We all respect the knowledge and judgment of some people more than others. To what extent do you have this kind of respect for each of these people?

[For questions C-3 and C-4 respondent is presented a card with the following fixed alternatives: To a very great extent, To a considerable extent, To some extent, To a very little extent, Not at all.]

- C-5. And one last question in this series—how well do you *like* each of these people *personally*?

[For question C-5 respondent is presented a card with the following fixed alternatives: He's my best friend, He's one of my best friends, He's a good friend of mine, I like him a lot and would like to know him better, I like him fairly well, I don't have much feeling about him one way or the other, I don't like him very much, I dislike him.]

Section D: Perceptions of Role-Related Interaction

[In this section the role senders to be interviewed are discussed one at a time. About each the following series of questions is asked.]

- D-1. What are the reasons for getting together with him—what kinds of things do you generally talk about?
- D-2. Are there any things he needs to inform you about in order for you to do a good job?
- D-3. When he tries to get you to do something, what sort of thing is it?
- D-3a. Is there anything else he might try to get you to do—anything that isn't ordinarily a part of your job?
- D-3b. Does he ever try to get you to do things differently than you usually do them? . . . than you are usually supposed to do them?
- D-4. As far as you know, does he usually let you know when he expects or wants something from you, or does he often keep these things to himself?

[For question D-4, respondent is presented a card with the following fixed alternatives: Always lets me know, Usually lets me know, Sometimes does, Sometimes doesn't let me know, Usually does not let me know, Never lets me know.]

- D-5. What does he usually do to try to get you to do these things?
- D-5a. What might he do to try to influence you to do them?
- D-6. How difficult do you feel it usually is to do what he wants from you?

[For question D-6 respondent is presented a card with the following fixed alternatives: Extremely difficult, Quite difficult, Not too difficult, Quite easy, Very easy.]

- D-6a. If "*Extremely difficult*" or "*Quite difficult*" to D-6, Why is that?
- D-7. Do you usually feel that you know how satisfied he is with what you do?

[For Question D-7, respondent is presented a card with the following fixed alternatives: I always know where I stand, I usually know where I stand, I sometimes do and sometimes don't know where I stand, I am often somewhat in the dark, I usually don't know where I stand.]

- D-8. Do you ever find it difficult to talk to Mr. (name of role sender) about anything?
- D-8a. If "Yes" to D-8. In what ways is it difficult?

Section E: Perceptions of Conflict and Ambiguity

- E-1. We have been talking about the way people learn what is involved in their jobs. Do you feel you are always as *clear* as you would like to be about what you have to do on this job?
- E-1a. Which of the following alternatives best represents how clear you are?
- E-2. How clear are you about the limits of your authority in your present position?
- E-3. How clear are you about what the people around you expect of you?
- [For questions E-1a, E-2, and E-3 respondent is presented a card with the following fixed alternatives: I am very clear, I am quite clear on most things, I am fairly clear, I am not too clear, I am not at all clear.]
- E-4. Is there any particular activity in which you are uncertain about what people expect of you?
- E-4a. If "Yes" to E-4: Can you tell me about it?
- E-5. Are you uncertain about what is expected of you by any particular person?
- E-5a. If "Yes" to E-5: Can you tell me about him?
- E-6. Have there ever been occasions when some of the people around you have different opinions about what you should be doing or how you should do it?
- E-6a. If "Yes" to E-6: Can you tell me about it?
- E-6b. If "Yes" to E-6: What do you generally do when that happens?
- E-7. If *conflicting expectations have not been mentioned in E-6*: Have there been times when one person wants you to do one thing and someone else wants you to do something else?
- E-7a. If "Yes" to E-7: Can you tell me about it?
- E-7b. If "Yes" to E-7: What do you generally do when that happens?
- E-8. How often do you get conflicting orders or instructions from different people above you?

[For question E-8, respondent is presented a card with the following fixed alternatives: Never, Rarely, Sometimes, Rather often, Nearly all the time.]

- E-9. Now let's talk a bit about some of the pressures that often arise on the job. How much pressure do you feel towards *better performance*?
- E-9a. If "Quite a lot" or "A great deal" to question E9: How do you feel about that? Is it reasonable? What is the source?

E-10. How much pressure do you feel toward doing *more work*?

E-10a. If "*Quite a lot*" or "*A great deal*" to question E-10: How do you feel about that? Is it reasonable? What is the source?

[For questions E-9 and E-10, respondent is presented a card with the following fixed alternatives: None at all, A little, Some, Quite a lot, A great deal.]

E-11. Are there ever any times when the amount of work you have to do looks like it might interfere with *how well* it gets done?

[For question E-11, respondent is presented a card with the following fixed alternatives: Never, Rarely, Sometimes, Rather often, Nearly all the time.]

E-12. Respondent is given items in job-related tension index as described in Appendix I. In answering these items respondent chooses from among the following fixed alternatives presented to him on a card: Never, Rarely, Sometimes, Rather often, Nearly all the time.

Section F: Background Information

F-1. How long have you worked for (name of company)?

F-2. What did you do before you started working here?

F-3. Have you had any promotions or has your responsibility increased in some other way since you started working here?

F-3a. If "*Yes*" to F-3: What promotions did you have?

F-4. Have there been any other important changes in the kind of work you do since you started working here?

F-4a. If "*Yes*" to F-4: What changes in the kind of work you do have occurred?

F-5. How long have you been in your present job?

F-6. How well did you know what was expected of you when you first came into your present job—very well, pretty well, not very well, or not at all well?

F-7. How or from whom did you learn what is expected of you in this job?

F-8. How much did you receive from (name of company) in wages or salary only before deductions last year?

F-9. In addition to this, did you have any income from bonuses, overtime, or commissions from (name of company) last year?

F-9a. If "*Yes*" to F-9: How much was that?

F-10. Are you married?

F-11. How many people were dependent upon you for a major part of their support last year?

P

Second Focal Interview

(Intensive Study)

Section A: Sources of Satisfaction in Job

All of us are concerned from time to time about the meaning of work in our lives. We'd like to know how you feel about things that might lead to satisfaction or dissatisfaction on the job. First I'd like to get your ideas about how things are for people in general, and then find out about your own situation.

- A-1. In general, how much satisfaction and pleasure do you think people get from the work they do? Do you think that most people are pretty happy with their work, or do they just look at it as something that has to be done?
- A-2. Compared with other things people do—things that are not connected with their work—how much do you feel that they view their jobs as a real source of satisfaction in life?
- A-3. What do you think are the major factors that lead to satisfaction in a job?
- A-4. What is most likely to be a source of dissatisfaction on a job?

Now let's turn to your own situation and experience. Some jobs seem just right for some people, they would really fit in and be very happy in them. But the same jobs just wouldn't fit other people; they just wouldn't be happy in them. It often takes us some time to know what we really want out of a job.

- A-5. What do you look for in a job? What makes a job a good one for you?
- A-6. What are some of the things that would make a job bad for you?

- A-7. How do you feel about your present job in these respects? How does it compare with other jobs you know about?
- A-8. What aspects of your job do you find *most* satisfying?
- A-9. What do you find *least* satisfying in your job?
- A-10. If you could redesign your job so it would be most satisfying for you, what would you like to have changed about it?
- A-11. What would have to be done to bring about that change?
- A-12. What are the possibilities that these things could be done?
- A-13. Have there been any attempts to make these changes in the past?
- A-14. Is anything being done now along these lines?
- A-15. What have you thought about doing to make your job better for you?
- A-16. All things considered, how satisfied are you with the way things are on your job?

Section B: Plans and Aspirations

Now we would like to get a long-range view of your career.

- B-1. When you were young, what did your family want you to be? Was there any particular occupation they wanted you to go into?
- B-2. I'd like you to think back to when you were in high school. What kinds of thoughts did you have then about what you wanted to be? What did you visualize for yourself as a career? Why is that?
- B-3. Since that time, have there been any major changes in your plans for a career? Can you tell me about them, sort of bring me up to date?
- B-4. If major changes in aspirations are reported: What has led you to decide to go into your present field instead of doing what you thought about doing earlier?
- B-5. Now turning to your present work, to what extent do you feel that you are realizing your ambitions?
- B-6. What does your wife think about your present position?
- B-7. How about your present plans? Do you think you might like to make a change in jobs in the future?
 - B-7a. If "No" to B-7: Why not?
 - B-7b. If "Yes" to B-7: What kind of change would you like to make?
 - B-7c. If "Yes" to B-7: What do you think your chances are for making that change?
 - B-7d. If "Yes" to B-7: Are you doing anything now that will help you make that change?
- B-8. Now about your wife again. Do you think she would like you to change to some other job? Can you tell me about that?
- B-9. In general, how would you sum up your present situation? How do you feel about your future?

Section C: Personal Requirements of Office

- C-1. Many positions in industry require that a person have not only certain technical skills and experience, but also certain personality characteristics or particular talents. Thinking of your own job, what sort of personal characteristics do you feel a person ought to have in order to be a good (name of office)?
- C-2. What sort of personal characteristics might lead one to do poorly in that job?

[For each characteristic mentioned: give question 3.]

- C-3. How do you feel you stack up as far as this quality goes?
- C-3a. Are there ever any times when being _____ might lead to difficulties?
- C-3b. Are there ever any times when you feel you might not be as much _____ as you'd like to be?
- C-4. Do you feel that you have any traits that make you particularly well fitted for this job?
- C-5. If you were moving on to a better job and had to find a replacement for yourself, what would you look for? Is there any way you think your replacement should be different from you on the basis of what you know now?

[Repeat questions C-3, C-3a, and C-3b for any additional qualities given in question C-5.]

- C-6. What kind of people do you like to have as work mates? What do you feel makes a person a good guy to have around?

[Repeat questions C-3, C-3a, and C-3b for any additional qualities given in question C-6.]

- C-7. *If conflict is indicated:* You mentioned that it would be good to be both _____ and _____ in your job. Do you think it's ever difficult to be both of these at the same time?
- C-8. *If conflict is indicated:* You mentioned that it would be good to be _____ in your job, but that you are sometimes _____. Does this ever lead to any kind of difficulties?
- C-9. Are there any characteristics you feel you'd like to have that you haven't mentioned so far?

Section D: Experienced Stress and Coping Techniques

Now to change the subject somewhat . . . there has been a lot of discussion lately about stress and pressure in American industry, especially in executive or supervisory jobs. Perhaps you have read some of the articles in magazines and management journals about this.

- D-1. How do you feel on this?
- D-2. Do you feel that your job imposes some stress and pressure beyond that which most people experience?
- D-3. What are some of the conditions or situations you have to deal with that you think are particularly stressful or pressure-inducing?
- D-4. As you see it, what leads to your feelings of stress?
- D-5. When you get into a situation of stress or exceptional pressure, what do you usually do to handle the situation?
- D-6. How do you feel about the way that handles the problem?
- D-7. Could you tell me about the last time you were in a stressful situation here on your job?
- D-7a. How did you feel about this when it came up?
- D-7b. What did you try to do about it?
- D-7c. What else did you think about trying to do?
- D-7d. How did it work out? Did the problem finally get solved to your satisfaction?
- D-7e. What else might you try to do if this comes up again?
- D-8. Have there been any instances in the last year or so when the pressure was so great that you felt you could not handle the situation?
- D-8a. What happened?
- D-8b. How did you resolve it?
- D-8c. When the tension is really pretty strong, what do you do to get it out of your system?
- D-9. Now for one final question. . . . This is the first of a series of studies we are conducting on problems people face on their jobs. Can you tell me about any problems other people sometimes face in their work that you don't have in your own job? Are there other kinds of problems we ought to consider for future studies?

Q

Role Sender Interview

(Intensive Study)

The role sender interview was somewhat unusual among interviews in that its primary focus was upon a person other than the respondent himself. As a result, considerable attention was paid to the orientation given the respondent at the beginning of this interview. This orientation is embodied in the following set of instructions given to all role senders at the beginning of their interviews:

This interview is part of a study being conducted by the Institute for Social Research of The University of Michigan about the kinds of problems people face in their work and how they deal with them. The aim of the study is to learn more about the kinds of problems people face in their work and how they deal with these problems.

Many problems for the individual in an organization arise out of the need to coordinate his work with that of people in other jobs. In other words, to understand one person's problems in his work, we have to understand a good deal about the work of the people who are associated with him as co-workers.

You are being interviewed as one of the people who may have some important stake in the way Mr. _____ (focal office holder about which respondent is being interviewed) goes about his job. So we would like to learn about your job and the way in which it related to that of Mr. _____.

Everything you tell me will be strictly confidential. No information which could identify you or Mr. _____ as individuals will be shared with anyone in the company. Moreover, inasmuch as this is a basic

research study, there is no plan to use the information we gather to make any changes in the organization. I would like to stress that this is *not* a job evaluation interview. All we are trying to learn is what people around Mr. _____ expect of him.

Before we begin, do you have any questions about what I've just said?

[In the above instructions and in various questions throughout the interview below, the name of the focal person is inserted in place of "Mr. _____."]

Section A: Role Sender's Office

First of all, I'd like to find out in some detail about your job and about your position in the company.

- A-1. What is your job here called?
- A-2. How long have you been on this job?
- A-3. How long have you worked for (name of company)?
- A-4. Briefly, what do you do on this job?
- A-4a. *If supervisory responsibilities not already mentioned:* Are you a supervisor—are there others whose primary responsibility is to you?
- A-4b. *If "boss" not already mentioned:* Who is your immediate boss?

Section B: Role Sender's Conception of Focal Office

You've given me a good picture of what your own job is like. Now I'd like to talk with you about Mr. _____'s job and how your two jobs are related.

- B-1. How long have you known Mr. _____?
- B2. If you had to tell someone who knows absolutely nothing about it, about Mr. _____'s job, how would you describe his job?
- B-2a. Does Mr. _____ have any other major responsibilities?
- B-2b. *If not already answered:* What specific things does Mr. _____ have to do to see that these responsibilities are met?
- B-3. Does Mr. _____ have any responsibilities in the company outside of his regular job—like responsibilities to a special committee or a union?

Section C: Relations Between Role Sender and Focal Person

- C-1. How often do you talk with Mr. _____?
- C-2. Regardless of how often you talk with each other, how often do you and Mr. _____ see each other?

[For questions C-1 and C-2 respondent was presented a card with the following fixed alternatives: Almost constantly, Several times a day, Once or twice a day, Several times a week, About once a week, A few times a month, Less often than a few times a month.]

C-3. I'd like next to read off to you a list of topics that people might talk to each other about in connection with their work. I'm interested in how often you and Mr. _____ talk together about these things. For each topic I read off to you, just tell me whether you and Mr. _____ talk about it often, sometimes, rarely, or never.

- a. Current problems in Mr. _____'s work.
- b. Future work assignments of Mr. _____.
- c. How well Mr. _____ is doing on the job.
- d. Things Mr. _____ needs to know in order to get ahead in the company.
- e. How well satisfied Mr. _____ is with his work, working conditions, or wages.
- f. Ways Mr. _____ can change or improve his present way of doing things on the job.
- g. Mr. _____'s future in the company.
- h. Changes that are going on in the company.
 - i. Long-range plans of the company.
 - j. Current problems in your own work.
- k. Things not related to the job.

C-4. Is there anything else you frequently talk about?

C-4a. If "Yes" to C-4: What is that?

C-5. Do you ever find it difficult to talk with Mr. _____?

C-5a. If "Yes" to C-5: In what ways is it difficult?

C-6. Suppose Mr. _____ were having some sort of difficulty in his job. To what extent would you be willing to go out of your way to help him if he asked for it?

[For question C-6 respondent is presented a card with the following fixed alternatives: Very great, Considerable, Some, Very little, Not at all.]

Section D: Activity-Oriented Role Pressures

You've told me a lot about Mr. _____'s job. Now I'd like to talk with you in more detail about the way he does his job—the sorts of activities, meetings, or other things he has to do to see that his job gets done.

Here is a list of several things Mr. _____ might do as part of his job.

[Respondent is presented the Activities List of the focal person. For a discussion of the construction of the Activities Lists, see Chapter 3.]

We'll talk about these things one at a time, and I'll ask you a series of questions about each.

- D-1. Regardless of how important they are to Mr. _____'s job, some of these things probably make a bigger difference to your *own* job more than other things. From the standpoint of how it affects your *own* job, how much does it concern *you* that this gets done properly?

[For question D-1 respondent is presented a card with the following fixed alternatives: Very much, Somewhat, Not so much, Not at all.]

- D-2. What would you do if Mr. _____ didn't do this?

[Questions D-3 through D-5b are asked of a respondent only if he answers "Very much" or "Somewhat" to D-1.]

- D-3. Nearly everyone has some things he'd want people he works with to do differently. Would you like Mr. _____ to do this first activity *exactly* the way he is now, or would you like him to do it *in any way* differently than he does now?

[Questions D-4 through D-5b are asked only if respondent indicates in question D-3 that he wishes the focal person to perform the activity differently.]

- D-4. How would you like Mr. _____ to do this differently?

- D-5. Have you ever tried to get Mr. _____ to do this in the way you want him to?

- D-5a. If "No" to D-5: Have you ever spoken to Mr. _____ or to others, or in some other way let him know that you would like him to do this differently?

- D-5b. If "Yes" to D-5 or D-5a: What effect did it have?

[The series of questions, D-1 through D-5b, is then repeated for each activity on the focal person's Activities List.]

- D-101. Is there anything *else* that you would like Mr. _____ to do, or is there anything else you would like him to do *differently*?

- D-102. If "Yes" to D-101: What is that?

[If respondent answers "Yes" to D-101, questions D-5 through D-5b are asked with reference to the addition made by respondent in D-102. The D-101, D-102, D-5, D-5a, D-5b series is then repeated until respondent replies "No" to D-101. A maximum of two such repetitions is given.]

- D-103. Everyone has some idea as to how he'd like others around him to divide their time. For each activity on this list, pick the statement

which best represents how much time you would like Mr. _____
_____ to spend on it.

[For question D-103 respondent is presented the Activities List and a card with the following fixed alternatives: A great deal more than he does now, Somewhat more than he does now, A little more than he does now, Same as he does now, A little less than he does now, Somewhat less than he does now, A great deal less than he does now.]

D-104. Some of these things on the list are probably more important to the job of Mr. _____ than others. What I'd like you to do now is to *rank* these activities in order of their importance to *his* job.

Section E: Power and Influence

- E-1. Now I'm interested in the way people go about getting other people to do things. How about yourself and Mr. _____? Do you remember any time in the past when you wanted him to do something that you had some difficulty getting him to do?
- E-2. If "Yes" to E-1: What was that?
- E-3. If "Yes" to E-1: How did you handle it?

[The series E-1 through E-3 is then repeated until respondent replies "No" to E-1. A maximum of two such repetitions is allowed.]

E-4. Next, I'll read off to you some ways in which people go about influencing others. Most people at one time or another do all of these things. I'm interested in how often you have done each of these things when taking up a suggestion or a request with Mr. _____. For each item I read off, just tell me how often you do it with Mr. _____.

- a. Bring him some new information about the situation.
- b. Remind him of a general policy, ruling, or agreement.
- c. Suggest he do it as a personal favor to you.
- d. Try to get him to see it as being right for the company.
- e. Order him outright to do it.
- f. Go through channels or through some other person.

[For question E-4, respondent is presented a card with the following fixed alternatives: Usually, Sometimes, Never.]

E-5. Is there anything else you do?

E-5a. If "Yes" to E-5: What is that?

E-5b. If "Yes" to E-5: How often do you do this—usually or sometimes?

Now, regardless of what you *would* actually do in some specific case, I'd like you to tell me what you *could* do as a last resort to influence Mr.

_____’s decisions and actions. I’ll read off a number of things and for each thing I’d like you to tell me the extent to which you could rely on it in getting Mr. _____ to do something.

- E-6. Could you take disciplinary action against him?
- E-7. Could you appeal to the personal friendship between you?
- E-8. Could you appeal to his loyalty to the organization or to the best interests of the company?
- E-9. Could you use the authority you have to make the final decision?
- E-10. Could you rely on the confidence he places in your special knowledge or advice?
- E-11. Could you reward him in some way—for example, by recommending him for a promotion or raise?
- E-11a. If “*A great deal*,” “*Quite a bit*,” “*Somewhat*,” or “*A little*” to question E-11: What specifically could you do?
- E-12. Could you make things difficult for him on the job if he refused to do something?
- E-12a. If “*A great deal*,” “*Quite a bit*,” “*Somewhat*,” or “*A little*” to question E-12: What specifically could you do?

[For questions E-6, E-7, E-8, E-9, E-10, E-11, E-12 respondent is presented a card with the following fixed alternatives: A great deal, Quite a bit, Somewhat, A little, Not at all.]

- E-13. Suppose you wanted Mr. _____ to do something. As a last resort, how could you get him to do it if he kept refusing?
- E-14. Suppose you were to make a request or recommendation of Mr. _____. To what extent would he pay serious attention to you?

[For question E-14, respondent is presented a card with the following fixed alternatives: Very much, Pretty much, Not very much, Not at all.]

Section F: Normative Expectations

[Respondent is given the 36 normative expectation items as described in Appendix E.]

Section G: Stylistic Aspects of Role Pressures

- G-1. [Respondent is first given the 22-item trait list described in Appendix C with the following instructions:]

Now I’d like to find out about the kind of a person you’d best like to work with as a (title of focal office), and I’d like you to do this with this list of personal characteristics I have here. Down the page are a number of words with four columns after each. Each column

has a heading at the top of the page. By putting a check mark in the columns next to each word, I'd like you to describe the kind of a person you'd like best as a (title of focal office).

- G-2. [After respondent completes his description, the following instructions are given and the second check list, identical to the first, is administered.]

Now I'd like you to describe Mr. _____ for me in the same terms you just used, using the same list of words. What I'm interested in here is the most accurate picture of Mr. _____ you can give me. Just go down the list again, checking in the appropriate column alongside each word.

- G-3. I've already asked you to describe Mr. _____ for me. Now I'd like to ask a somewhat different question. How would you like him to be different from the way he is now?

Section H: Background Information

- H-1. How old are you?
- H-2. How many grades in school have you finished?
- H-3. Have you had other schooling?
- H-3a. *If "Yes" to H-3:* What other schooling have you had?
- H-3b. *If respondent has attended college:* Do you have a college degree?
- H-4. How much did you receive from (name of company) in wages and salaries *only* in 1959 before any deductions?
- H-5. In addition to this, did you have any income from bonuses, overtime, or commissions from (name of company)?
- H-5a. *If "Yes" to H-5:* How much was that?

R

National Survey Interview

The national survey interview materials dealing with conflict and ambiguity were administered as part of a longer interview schedule, the earlier part of this schedule dealing with the respondent's financial situation, his perception of the state of the national economy and his history, if any, of unemployment. The respondent's occupation and industry were ascertained early in the interview. The conflict and ambiguity questions, occurring at the end of the interview, were as follows:

1. Now let me see, you said you were working now?
2. Most of the time, do you work for yourself or for someone else?

[Only self-employed respondents are given questions 3-12.]

3. Do you work more than 20 hours per week on your (main) job?

[Ed. note: respondents answering this question negatively were not administered the subsequent conflict and ambiguity questions.]

4. Does anyone supervise you when you work?
5. Do you usually supervise others when you work?
6. Do you employ others to work for you?
7. *If "Yes" to 6:* How many people do you usually employ?
8. *If "Yes" to 6:* Do you supervise all your employees' work directly, or do some of them report to other supervisors under you?
9. *If respondent indicates in 8 that he supervises only some employees directly:* How many different ranks of supervisors are there in your company (organization)?
10. How many people report directly to you?
11. Are you responsible to anyone besides yourself, like a partner or a group of stockholders?

- 11a. If "Yes" to 11: Does he (do they) take an active part in running the company (organization)?
12. How long have you been in your present occupation, working for yourself?

[Only non-self-employed respondents are given questions 13-23.]

13. Do you work more than 20 hours per week on your (main) job?

[Ed. note: respondents answering this question negatively were not administered the subsequent conflict and ambiguity questions.]

14. How long have you been in this job you have now?
15. About how many people work at the same place (in the same location) where you work?
- 15a. If 100 or more work at respondent's place of business: What is the name of the company (organization) you work for?
16. Does the company (organization) you work for employ other people besides the ones that work at the same place as you do?
17. To the best of your knowledge, about how many people work for your company (organization) altogether?
18. Do you have a boss or someone you're responsible to?
- 18a. If "No" to 18: How is that?
19. If "Yes" to 18: Does your boss report to someone who is over him, or is he the top man in the company (organization)?
- 19a. If "Yes" to 18, and boss reports to someone: Is there someone over your boss' boss or is he the top man in the company (organization)?
20. If "Yes" to 18: Do you report to anyone else besides your boss on some of the things you do in your job?
- 20a. If "Yes" to 20: How often do you report to someone besides your regular boss?
21. Do you supervise others in your job?
22. If "Yes" to 21: How many people report directly to you?
23. If "Yes" to 21: Are there other people for whose work you are responsible, even though you do not supervise them yourself?
- 23a. If "Yes" to 23: For how many people are you responsible altogether?

[The remaining interview questions are asked of all respondents regardless of whether they are self-employed or not.]

24. Most people have things to do in their work that sometimes cause them problems. In the next part of the interview we would like to ask you some questions about what happens in your work and how it affects you. On the average, how many hours of your working day are spent dealing with people as part of your job?
25. How often during a day do you have something to do as part of your job with each of the following groups of people:
Your boss or other people over you
26. People you supervise, directly or indirectly

27. Others who work in your department but who are not under or over you
28. Others in the same company, but not in your department
29. Outsiders who have business with the company, like salesmen or customers
30. Other people in the company or outside of it
- 30a. If "*Rarely*" or more to 30: Please explain

[For questions 25 through 30a respondent is presented a card with the following fixed alternatives: Never, Rarely, Sometimes, Rather often, Nearly all the time, Doesn't apply.]

- 31-45. [Respondent is given items in job-related tension index as described in Appendix I. In answering these items respondent chooses from among the following fixed alternatives presented him on a card: Never, Rarely, Sometimes, Rather often, Nearly all the time, Doesn't apply.]
46. Some jobs put people "in the middle" between two sets of people who want different things, like management and the union, customers and the company, or the boss and your fellow employees. In your job, how often do you feel "in the middle" between two sets of people like that?

[For question 46 respondent is presented a card with the following fixed alternatives: Nearly all the time, Rather often, Sometimes, Rarely, Never, Doesn't apply.]

- 46a. If "*Rarely*" or more to 46: Can you give me an example of what you mean?
47. Some people have problems at work that cause them very little worry, while others have the kind of problems that worry them a great deal. What are the problems in your work that tend to worry you most often?
48. We are also interested in your health. Would you say you are in excellent health, only fair health, or in poor health?
49. During the past year, how many times have you been absent from work for a day or more at a time?
50. Compared to the way you used to feel when you first started working on *this* job, would you say you feel less satisfied, more satisfied, or about as satisfied as you used to be?
51. Considering your job as a whole, how well do you like it?

[The interview concluded with a series of questions ascertaining the following characteristics of the respondent: age, marital status, sex, number of children under 18 in family, age of youngest child under 18, education, income.]

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